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ABSTRACT

Syndicate methods in higher education, which use small groups, are considered in 14 chapters. A class of 20-40 students may be divided into syndicates of 4 to 8 students, and the bulk of work consists of assignments conducted on a cooperative basis. There is some alternation between the work in the student-led syndicates and the tutor-led plenary sessions of the whole class. Considerable variations in the way the technique is employed are covered in the different chapters. Chapter titles and authors are as follows: "Syndicate Methods Placed in Context" (Gerald Collier); "Experiments in College Teaching" (G. Collier); "Studies in French Literature" (Colin Evans); "A New Medical School in Australia" (Rufus Clarke); "Kinesiology: Academic Aspects of Physical Education" (Peter Glew); "A Report from America" (Leslie Beach); "Experiments in the Exploration of Values" (G. Collier); "An Australian Project on Regional Studies" (Dennis Moss); "The Engineering Syndicate Study" (Gerald Edwards); "The Six College Project" (Peter Chambers); "The Influence of Examinations" (Iain Rodger); "The Tutor's Role" (Glyn Owen); "The State of Play" (M. L. J. Abercrombie); and "Guidelines for an Aspiring Practitioner" (G. Collier). (SW)

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The Management of PEER-GROUP LEARNING

Syndicate Methods in Higher Education

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Edited by Gerald Collier

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The Management
of
**PEER-GROUP
LEARNING**

Syndicate Methods in Higher Education

Society for Research into Higher Education

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CONTENTS

Acknowledgements	1
INTRODUCTION	
1 Syndicate methods placed in context Gerald Collier <i>University of Durham</i>	3
RECORDS OF EXPERIENCE: A COURSE FOLLOWING A DECLARED SYLLABUS	
2 Experiments in college teaching Gerald Collier <i>University of Durham</i>	13
3 Studies in French literature Colin Evans <i>University College, Cardiff</i>	24
4 A new medical school in Australia Rufus Clarke <i>University of Newcastle, New South Wales</i>	34
5 Kinesiology: academic aspects of physical education Peter Glew <i>University of Durham</i>	42
6 A report from America Leslie Beach <i>Hope College, Holland, Michigan</i>	48
7 Experiments in the exploration of values Gerald Collier <i>University of Durham</i>	55
RECORDS OF EXPERIENCE: A SINGLE COMPONENT WITHIN A COURSE	
8 An Australian project on regional studies Dennis Moss <i>University College, Cardiff</i>	62
9 The Engineering Syndicate Study Gerald Edwards <i>City University, London</i>	67
COMPARATIVE AND GENERALIZED STUDIES	
10 The six college project Peter Chambers <i>Bradford and Nkley Community College</i>	77

CONTENTS

- 11 The influence of examinations 87
Iain Rodger University of Durham

- 12 The tutor's role 92
Glyn Owen Liverpool Institute of Higher Education

OVERALL REVIEW

- 13 The state of play 100
M.L.J. Abercrombie University College London

- 14 Guidelines for an aspiring practitioner 105
Gerald Collier University of Durham

- Postscript: scope for further investigation 112
Gerald Collier University of Durham

- The contributors to this volume 114

- References 117

- Index 125

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Introduction

1 SYNDICATE METHODS PLACED IN CONTEXT

Gerald Collier

This chapter sets out first to define the distinctive features of 'syndicate methods' in the context of other 'group-teaching' methods, and second to describe the distinctive outcomes of syndicate methods as seen against a brief survey of the purposes of higher education.

A DEFINITION OF SYNDICATE-BASED METHODS

Many teachers in higher education work in one way or another with small groups of students. But the circumstances and the techniques vary widely, and much confusion arises from the different assumptions built into the language used to describe the different techniques. It seems necessary therefore to preface any discussion of the use of syndicate methods with definitions of the terms used. It is convenient to adopt the brief statements formulated by Bligh to distinguish the main varieties of group techniques (Bligh 1971; a useful selection of examples is given by Simons and Squires 1976).

'Brain-storming — an intensive discussion situation in which spontaneous suggestions as solutions to a problem are received uncritically.

Buzz-groups — groups of 2 — 6 members who discuss issues or problems for a short period, or periods, within a lesson.

Controlled discussion — teaching in which students may raise questions or comment, but the general direction is under the strict control of the teacher. This is normally used after a presentation method with a class, not a group.

Free group discussion — a learning situation in which the topic and direction are controlled by the student group; the teacher observes.

Group tutorial — the topic and general direction are given by the tutor, but the organization (or lack of it), content and direction of the discussion depends on the student group (up to 14 members).

Individual 'tutorial' — a period of teaching devoted to a single student.

Seminar — group discussion introduced by the presentation of an essay or other work.'

In a syndicate-based course a class of (say) thirty students is divided into 'syndicates' of 4 — 8 students, and the bulk of the work consists of a series of assignments carried out on a co-operative basis by the syndicates acting as teams, for much of the time in the absence of the

teacher. In some cases the syndicate-based work constitutes the whole of a course designed to follow a systematic academic syllabus. In others it constitutes a component of a course designed to develop particular higher order cognitive skills in the students. Either way the distinctive features are three: the small-group work is central to the academic study; the assignments are designed to draw on a variety of selected sources as well as on the students' first-hand experiences; and there is some alternation between the work in the student-led syndicates and the tutor-led plenary sessions of the whole class. The heart of the technique is the intensive debate within the syndicates; which, as will be seen later (Chapters 2, 3, 8), by no means prevents individuals from developing their own distinctive opinions (cf Entwistle 1981; Wilson 1981). It will be clear that a syndicate-based method is not precisely similar to any of those listed above.

There are considerable variations in the way the technique is employed, as will be seen in the successive chapters of the present book. The distinctive features of each will be noted at the beginning of each chapter.

AIMS AND ASSUMPTIONS IN HIGHER EDUCATION

It is not possible to assess the usefulness or otherwise of syndicate techniques without clarification of one's aims in teaching. If one reads any discussion of teaching or study in higher education one finds certain assumptions built into the argument.

First, it is assumed that students should emerge from a course with a certain amount of information, whether of facts or of authoritative views, lodged in their minds.

Second there is an expectation that in certain subject areas a student should acquire manipulative skills, such as those called for in a zoologist or an architect (cf University Grants Committee 1964).

Third, we find the assumption that students should acquire certain intellectual skills, such as the ability to expound an argument in a logical form, to marshal their evidence for a particular view in a coherent manner, to clarify the major concepts of their subject area, to write clearly and to carry out such computations as are needed in their subject. Bloom and his colleagues offer a parallel and overlapping breakdown of skills into the application of information, the analysis of problems and the synthesis of information (Bloom et al. 1954; cf UGC 1958).

I have avoided the word 'knowledge' in these formulations since it contains the ambiguity to which Newman drew attention: 'When I speak of knowledge I mean something intellectual ... something which sees more than the senses convey; which reasons upon what it sees, and while it sees; which invests it with an idea.' This he sets off against '*mere* knowledge, or knowledge considered in its *matter*', or the 'vast multitude of ideas' which some people possess 'but with little sensibility about their real relations towards each other' (1853). We may compare the corresponding formulations of Lonergan and Bloom: 'I conceive human knowing to be, not

just experiencing but a compounding of experiencing, understanding and judging. Hence, if there is historical knowledge there must be historical experience, historical understanding and historical judgment' (Lonergan 1971; cf Ausubel 1963). In Bloom's phraseology, knowledge 'includes those behaviours ... which emphasize the remembering, either by recognition or recall, of ideas, material or phenomena' (Bloom et al. 1956).

These are the minimum expectations. The Hale Committee add further qualities, writing in the following terms. The teacher in an Oxford tutorial 'will be concerned to ensure that his pupil gives critical attention to his facts, recognizes false arguments, and attains an understanding of the way of thinking which has developed as most appropriate and useful for his subject.' 'In every student's course,' they continue, 'there needs to be some basic teaching in which he is provided with a framework for his studies. In such teaching ... in subjects of controversy, he gets a balanced picture of the main schools of thought. ... A further function of such teaching is to kindle the enthusiasm and stimulate the thought of the student.'

'We are clear,' the Hale Report continues, 'that (the discussion period) has a vital part to play in university teaching. Recent research into the learning process has led to increasing recognition of the importance of active participation by the students. ...' Unfortunately, however, according to a Cambridge report which is quoted, there is a tendency for tutorials and seminars 'to assume much more the character of a small instructional class' and for undergraduates 'to regard it as the discipline by which their progress in acquiring factual knowledge will be regularly probed and they will be kept up to the mark.' 'In our view,' they say, 'good teaching by discussion is that for which an antecedent effort is required from the student. There is no better way of evoking this effort than by setting the student, to be done in his own time, an essay ... for which fairly extensive preparation will be necessary and which will be criticised and discussed at the next meeting. A written exercise of this kind ... is of value in training him to work on his own, and to read the literature of the subject with an alert and critical mind. It helps him to give coherence and clarity to his thinking, and trains him in the necessary art of using language and communicating his ideas to others.'

If we turn to writers on small-group techniques we find a further, and different, emphasis. Abercrombie, for example, writes (1978) 'the distinctive contribution that small group teaching can make to education is in encouraging students to become more autonomous as learners.' According to Rudduck (1978b) 'the distinctive potential of small group work is learning which is based on the expression, exploration and modification of ideas — in cooperative company,' and 'the creative contribution of the chairman to the work of the small group is her concern for procedures that promote independence of student learning.'

Other developments too have been designed to reinforce the

independence or autonomy of students, such as the Keller Plan (Keller 1968; Hartley and Davies 1978) and the technique of peer tutoring (Goldschmid 1976). Prof. Keller's scheme was to give students carefully prepared self-instructional materials which they could work on individually at their own pace, with tutorial assistance available if necessary. Each phase of the course being tested for mastery of the material. The system of peer tutoring depends again on the use of what amounts to self-instructional materials but it involves detailed questioning and answering between pairs of students. The system elicits the detailed translation of source material into students' peer-group language which occurs in syndicate work, but on the restricted basis of a pair of students.

The above ideas of the purposes of higher education may be summarized in the following list of mental powers or qualities which students may acquire:

- 1 Memorized information, including facts, concepts and authoritative views.
- 2 Certain manipulative skills, such as are needed in zoology or architecture.
- 3 Certain intellectual skills, such as logical exposition, marshalling of evidence, clear expression or computation.
- 4 A conceptual structure or framework for his subject, of such scope as to provide room, in a controversial topic, for a balanced picture of different schools of thought.
- 5 The ways of thinking which have developed as most appropriate and useful for the subject of study, which must include the identification of appropriate evidence or data and a command of the characteristic types of argument.
- 6 A capacity to read with an alert and critical mind.
- 7 A habit and expectation of learning for oneself, of becoming autonomous or independent as a learner.

Alongside the views outlined above two further analyses of the functions of higher education have more recently emerged, relating it more specifically to the social context: the context of a group of advanced industrial societies operating, in the late twentieth century, in a close but ambivalent relation to a number of developing societies. I would like here to refer to two relevant reports, one commissioned by the (American) Carnegie Commission on Higher Education and the other by the Club of Rome.

The first, *Professional Education*, by Edgar Schein (1972), argues that most of the more acute social, cultural, political and economic problems of contemporary societies in the later part of the twentieth century are essentially inter-disciplinary and multi-disciplinary: they cannot be adequately analysed by any specialists, however expert, in any single discipline or subject area. They can only be effectively handled by teams of

people drawn from different specialisms, who are accustomed to trying to enlarge their own partial view of the problem by listening with care to the views of the other specialists and checking by active questioning the accuracy of their own understanding of the others' views. It is not irrelevant to note that the Social Science Research Council, in its recent restructuring, has placed as its first objective 'to promote the further development of social science research, including in particular multi-disciplinary research, that will advance understanding both of current issues of public importance and of fundamental questions about the working of society' (1981).

Over and above the habit of collaborating with other specialists must also be developed a habit of collaboration with non-specialist, and often ill-informed, members of the public. Yet few institutions of higher education build this kind of experience into their curriculum: which is normally constructed on the basis of individual competition within separate disciplines.

The second report is *No Limits to Learning* (Botkin et al. 1979). The point of departure of this book is the fact that the scale of the problems facing mankind, and their potential for catastrophe, are now fearsome. Even ordinary people, the chairman of the Club of Rome notes in his foreword, 'realize that increasing world disorder and real or feared scarcities of natural resources exacerbate political tensions and trigger military build-ups of demential proportions, stifling peaceful development; that in a polity where might is right the myth of national sovereignty but aggravates the inequalities among states, while social injustice coupled with inefficient, often corrupt institutions breeds civil violence, which readily expands internationally; that polluted and impoverished environments, besides vitiating our life, also drag the economy downward at a time when recession and inflation already conflow into stagflation, spawning unemployment, frustration and still more tension and disorder. ...'

The authors of the report argue that both individuals and societies have traditionally operated on the basis of a combination of 'maintenance learning' and 'learning by shock'. By the former they mean 'the acquisition of fixed outlooks, methods, and rules for dealing with known and recurring situations', which 'enhances our problem-solving ability for problems that are given', being 'designed to maintain an existing system or an established way of life'. It is 'indispensable to the functioning and stability of any society'. But from time to time a society is faced with catastrophe: of plague, of famine, of devastation by war, of economic disruption, of social revolution. This acts as a goad to the forming of a new outlook, as a catalyst to fresh learning.

At this period of history, however, the potential for disaster is on a scale of such magnitude that mankind cannot afford to depend on the alternation of maintenance learning and shock learning. What is needed is 'innovative learning'.

This concept entails three aspects. In the first place it involves an

anticipation of future contingencies rather than an *adaptation* to current or recent events. A second feature is *participation*: 'it is not enough that only elites or decision-makers are anticipatory when the resolution of a global issue depends on the broad-based support from some critical mass of people'; 'participation is more than the formal sharing of decisions; it is an attitude characterised by cooperation, dialogue, and empathy'; and it involves not only a recognition of rights but an acceptance of obligations. Thirdly innovative learning entails a conscious concern with values, both in a willingness to question the traditional values of any society and in a determination to attach highest priority to human survival, and beyond that to human dignity, in all countries. The latter they interpret as involving 'the mutual respect for individuals in culturally diverse societies, and self-respect', as well as autonomy in the sense of 'the capability to make judgments and decisions necessary to act with personal independence and freedom.'

The anticipation of future contingencies, however, is not a simple matter: new information, new problems, always tend to be assimilated into existing structures of thought, derived from past experience in past contexts. To anticipate successfully requires a recognition of the limitations of the old contexts and a willingness to extend and enrich them by embracing new ones, and to engage in a continuing dialogue with people drawn from other backgrounds. Thus it may become possible to develop shared perceptions of new problems, shared formulations and common understandings.

The above proposals are not of course unchallengeable. The willingness to question traditional values always carries dangers; to attach highest priority to survival could be read as a justification for 'devil take the hindmost'. But the broad picture of the global condition, and of the consequent educational needs, must command respect, even if one doubts whether there is, or will be, the will to achieve such ambitions. In the present context, however, the analysis and recommendations of Schein and the Club of Rome team serve to bring out three further aspects of student development which may be regarded as important in the later part of the twentieth century:

- 8 A habit and expectation, in the student, of enriching his academic thinking and professional understanding through continuing interchange with other people.
- 9 A personal commitment of the student to his field of study, with a habit and expectation of taking an active initiative in searching out relevant ideas and experience, however unfamiliar.
- 10 A capacity to make discriminating judgements in the area of values.

On two of these items it is useful to introduce into the picture evidence brought forward by recent investigators. On item 8 it is instructive

to note that both Abercrombie and Rudduck go beyond the principle of building up students' autonomy and discuss the way in which students learn about their subject at greater depth and with greater richness through interaction with their peers (Abercrombie 1978, 1979; Rudduck 1978b). Piaget also emphasizes the significance of peer-group interaction: 'discussion and the discursive necessities of intellectual exchange are indispensable for the education of the analytic mind and in order to bring the mind to recognize the value of fixed definitions and clear concepts' (1971).

On item 9 there is the evidence brought forward by Marton and his colleagues at the University of Gothenburg. The main relevant features are three. First, there is the distinction between a 'deep processing' of the material studied or a 'deep approach' to it and a 'surface processing' or 'surface approach'. An active deep approach is characterized by a search for the inner core of the argument, for personal relevance or meaning in the material, and a questioning, perhaps challenging, attitude to it. A surface approach tends to concentrate on memorizing discrete facts or ideas (Marton and Säljö 1976a). Second there is the finding that students usually expected examination questions to test the kind of miscellaneous facts that were acquired through a surface approach, but that when they appreciated that the questions asked subsequently would test the kind of reasoning and appreciation of argument that were acquired through a deep approach, some students would switch to a deep approach but others were apparently unable to (Marton and Säljö 1976b). Third, there is some evidence that a surface approach is associated with a sense of excessive syllabus content to be assimilated if examinations are to be passed and a low level of interest and high level of anxiety (Fransson 1977). Entwistle (1981) and Wilson (1981) offer useful discussions of this work and there have been follow-up investigations by Entwistle, Laurillard and others; Fransson (*ibid.*) and Ford (1979) additionally argue that one of the critical factors is the degree of 'personal meaningfulness' found by students in the material studied.

So much for the aims of higher education and their interpretation. The fact, however, is that the actual achievement falls far short of these aims. The literature is crowded, from Newman onwards, with criticisms of the way higher education functions. Newman himself, writing in the 1850s, castigated 'the practical error of the last twenty years — not to load the memory of the student with a mass of undigested knowledge, but to force upon him so much that he has rejected all' (Newman 1853 Discourse VI). Whitehead writes scathingly of 'the paralysis of thought induced in pupils by the aimless accumulation of precise knowledge, inert and unutilised' (1929). The Hale Committee themselves comment: 'The isolation of the student during the traditional three-hour paper may place a premium on unintelligent memorisation, and may tempt him to prepare for it by learning lecture notes by heart for regurgitation in the examination hall. This can be a very serious danger, since an examination which is merely a test of memorisation has a deplorable influence on learning and teaching.'

Becker shows how students in an American medical school simply 'find out what the staff want them to know' and study that in order to pass their examinations (1961). An ICI chairman declares that 'the products of academic education were found wanting by industry', and refers to 'the inability of the academic to make decisions in real situations' (Robinson 1968). The Finniston Report *comments* that British prosperity 'depends on engineering excellence in its broadest sense, including design, production, marketing and servicing,' and that although 'the chronic sickness of British manufacturing' derives in part from the outlook or culture of our society, it is due in part to the serious shortage of graduates of adequate quality emerging from the engineering departments of universities and polytechnics, ie with the appropriate interest or skills in design and in production (1980).

This is not to claim that higher education has produced no successes; but they are too often the high flyers, the potential FRSS and FBAs. It seems abundantly clear that neither cognitive nor affective aims are very fully attained for a large proportion of students.

Syndicate-based techniques have been evolved to create conditions of study which promote a fuller development in respect of aims 3 — 10 than customary lecture/discussion techniques. The present volume offers a series of brief case studies reporting first-hand experience of the technique, together with certain comparative studies which offer more generalized conclusions. Very broadly, we can say that the most distinctive features of the experience reported here are the following.

The first, which occurs repeatedly in the following chapters, is the *heightened motivation of the students* and their *increased involvement in the academic work*, as compared to customary lecture/discussion procedures. The evidence is varied: better attendance at timetabled sessions (Chapter 4; see also Field 1973, reported in Billing and Furniss 1973); a willingness to put more time and energy into this work (Chapters 2, 3, 5, 7, 9; see also Field *ibid.* and Rudduck 1978); greater satisfaction with the work and indeed in one case 'the unusual quality of sheer enjoyment of a compulsory course' (Chapters 2, 9; Newhouse 1978; see also Goldschmid and Goldschmid 1976); a readier acceptance of mutual criticism among members of a syndicate (Chapters 3, 5, 8; Cornwall 1980); an active search for information (Chapters 5, 11) and wider range of reading (Chapters 2, 10); a stronger commitment among individual students to the homework and the tasks of the course (Chapters 2, 6). In the literature we also find reports of increased co-operation between the members of syndicates (Deutsch 1949; Field 1973; Zander 1969; Berman 1974); a greater willingness to attend carefully to one another (Deutsch 1949; Berman 1974); and a stronger sense of mutual obligation among the members (Deutsch 1949; Collier 1966; Rudduck 1978).

The second feature is the *development of higher order intellectual skills*, such as — in Bloom's terms — the interpretation and extrapolation of

data, the application of learned principles in fresh situations, the synthesis of diverse materials to form a coherent picture, or the evaluation or appraisal of given materials; or — to refer back to the earlier discussion — the qualities summarized in aims 3, 4, 5 and 6. Again we have a variety of reports: of a more sophisticated and systematic approach to problem-solving (Chapters 4, 9; cf Magin 1982); of a better capacity for applying learned concepts in new situations (Chapters 2, 4, 9; see also Clement 1971); of a fuller appreciation of the rich variety of opinion and experience in the consideration of any complex question (Chapters 5, 7, 9), and — in part perhaps arising out of this — a keener appreciation of the provisional nature, not only of a syndicate's own findings but of the current state of play in the topic under study and a rejection of the search for 'the right answers' (Chapters 3, 5, 10, 11; cf Perry 1968); of an enhanced sense of the personal meaningfulness of the material (Chapters 3, 4, 5; see also Fransson 1977) and with this an increase in the 'deep processing' of the material studied (Chapters 2, 5, 7; see also Rudduck 1978; Entwistle et al. 1979; Entwistle 1981; Marton and Säljö *ibid.*); or a more critical approach to reading (Chapters 2, 10) and an improvement in the skills of exposition and communication (Chapters 2, 3, 8, 9; see also Fransson *ibid.*); or an improvement in the capacity for interpreting the evidence and analysing the concepts involved in the study of a topic and forming independent judgements (Chapters 3, 5, 7, 9, 11). In the literature we find also White, reported in Costin 1972; Collier 1966, 1968; Rudduck 1978; Todd and Todd 1979; Cornwall 1980). It is, however, an almost startling shift of approach from surface to deep processing, that so often appears to be indicated by the experiences reported in the present book, which is the most conspicuous aspect of higher order skills.

Further observations are also recorded (Collier 1980). The syllabus coverage tends to be less (Chapters 2, 3, 5), though the knowledge acquired is roughly the same (Chapters 10, 11). Dubin and Taveggia (1968, quoted in Costin *ibid.*) are categorical about the latter point, but a handful of reports indicate a different conclusion. Thus Blunt and Blizzard (1973, quoted in Abercrombie 1979) found, in teaching anatomy to undergraduates, that their normal examination results improved when one half of the hour period was given to student-led discussion in groups of five. More striking than the small number of observations reported from universities, although not in the higher education sphere, are certain studies of the learning achieved by children working in small groups. Oldfield (1964, quoted in Amaria et al. 1969) found that the members of groups of four children aged nine gained in knowledge more than bright children working alone. Aebli (1963, quoted in Amaria et al. *ibid.*) has reported classroom experiments with small groups of three children, also nine years old, in which 'children of lower than average ability, working in teams, learned and understood quite as well as more intelligent children taught in this fashion, though formal class teaching was significantly poorer for the

low ability children receiving this treatment.' (Ability was measured in terms of IQ.) Amaria et al. (ibid.), in a carefully organized series of experiments with 12-year-old pupils in a co-educational secondary school, found striking advantages to the children who collaborated over those who studied on their own. Some of the results were quite notable: the below-average girls scored outstandingly high marks not only on retention tests but on tests of the transfer of the learned material to untaught problems and on delayed transfer tests. Improved conceptual development at child level has also been reported by Goldschmid and Goldschmid (ibid.) and Barnes and Todd (1977).

In short, there is some indication in these chapters of the potential of the technique for developing the habits of inter-disciplinary collaboration for the analysis and handling of complex problems — as Schein presents it — or — as the Club of Rome authors put it — for extending the context of thought of individuals through intimate debate in small groups; for facilitating a dialogue on contentious issues between participants drawn from conflicting backgrounds; and for drawing into these debates an awareness of the value-assumptions implied by different views and an articulation of those held by the various participants. In other words it seems that there is some fulfilment not only of the simpler aims summarized in items 1 and 3 (on page 6) but of the more ambitious aims summed up in items 6 and 7 on page 6 and items 8, 9 and 10 (on page 8). This is not to claim that every syndicate-based course is a resounding success, and indeed this present volume records many difficulties and problems. However, in the absence of detailed and sustained investigation of syndicate methods (as suggested in the Postscript) it is for the reader to judge how far a *prima facie* case has been established. The final chapters provide guidelines for the teacher who wishes to try out the technique in his own classroom.

2 EXPERIMENTS IN COLLEGE TEACHING

Gerald Collier

The main part of this chapter records an experiment conducted by myself in an American university. To this is added an appendix which supplements the American evidence, based on a videotape which I assembled at Bede College, Durham, from a number of discussions held by myself with various groups of tutors and students on their experience of syndicate-based courses.

The distinctive features of the American course are the following: the syndicates had five or six members; the membership was self-selected; there was no formal appointment of chairman or recorder for the syndicates, in the majority of assignments I handled the consolidation phase by means of a formal lecture summarizing the written reports handed in by the syndicates; and I adapted the formal examination at the end of the course to attempt to assess powers of judgement rather than assimilated information. Examples are given of an assignment and of student comments. The major features of the latter are the intensity of student involvement in the work, the reports of closer personal relations with the tutor than usual, and the emphasis on the intellectual stimulation derived from the syndicates.

The appendix records additional protocols on the strength of student involvement, and some evidence indicating a shift towards a 'deep active processing' of the academic material studied.

THE ORGANIZATION OF THE AMERICAN COURSE

The point of departure for several of the schemes recorded in this volume was the report of an experiment conducted by myself at Temple University, Philadelphia, in 1965, published in the *Universities Quarterly* (Collier 1966). The course was an introduction to the sociology of education and most of the forty students were serving teachers working for a Masters degree. My object was to see if a straightforward academic course based on a formal syllabus could be effectively taught using a syndicate method, the reservation being always present that if it broke down I could revert to my customary pattern, of formal lecture followed by discussion.

The class was held daily for six weeks, for periods of eighty minutes. With a loss of two days the total of 'contact hours' was thirty-seven — roughly equal to one and a half hours per week for a normal academic year in England. Seven syndicates of five or six students were formed, on a self-selecting basis, and were issued with the same assignment; in other areas of the subject two or three different assignments were distributed among the

seven syndicates. The course was divided into ten phases, each assignment being designed to provide about half a week's work. Most of the assignments required a written report on each of the three or four questions provided, and in these cases I summarized the reports in a formal lecture on the following day, correcting misconceptions and extending beyond the students' material in directions I regarded as important. In a few cases oral reports were called for rather than written, and one or two syndicates sat as a panel. Plenary discussions were held at appropriate points throughout the course. A final examination of one and a half hours was set.

INPUT

In designing the assignments I had several aims in mind. First I wished both to tap the professional experience of the students and to prompt them to relate the academic material studied to their experience. Second I considered it important to supply a range of references that would provide both for the ablest and for the least able in the class. Third I wished to consider principles of school organization and authority structure in close relation to organizations outside the schools.

I was concerned also to ensure that the students had ready access to the books needed and I therefore arranged for selected paperbacks to be available in the university bookshop and borrowed a small class library — drawn from the university library — to be placed in the lecture room. Syndicates were encouraged to distribute the reading and reporting among their members.

The six-week course was concerned with a few major concepts: social class differentiation in western societies; 'organic' and 'mechanistic' types of organization in industry; the value-assumptions involved in different types of authority structure; the processes of social change and innovation; the convergence of the above in the school system.

The course opened with the showing of a film, 'Twelve Angry Men'. In this film Henry Fonda takes the part of a single dissident in a jury sitting at a murder trial. As a constituent of the syllabus the purpose of the film was to provide a vivid example of racial and social-class prejudice in action, together with the emergence and exercise of a particular type of authority. In addition it served two further purposes. It gave the members of the syndicates, who were mostly unknown to one another, a vivid shared experience as the basis of their first assignment and of a number of references in later phases of the course. It also provided the opportunity to establish at the outset an expectation of relating the theoretical discussion in the syndicates to first-hand experience. This is an expectation which is often inhibited by the bookish emphasis that prevails in western educational systems.

The following questions illustrate the way in which assignments were composed.

Phase VII: Organizational structure

- (1) What are the characteristics of the 'organic' and 'mechanistic' forms of organization described by Burns and Stalker? In what circumstances do you suppose each to have advantages? What features of the organization of Plant Y under Messrs Stewart and Cooley fit in with Burns and Stalker's analysis?

See Burns and Stalker: *The Management of Innovation* chapters 5 and 6

Revans: *Standards for Morale* chapters 1, 8, 9, and 10

Guest: *Organizational Change* chapters 2 — 5

Brown: *Techniques of Persuasion* chapters 2, 3 and 8

Thelen: *Dynamics of Groups at Work* chapter 4

- (2) How far are the 'organic' and 'mechanistic' patterns of organization valid or useful in schools in relation to (a) basic moral principles in the school community; (b) formal academic work; and (c) day-to-day administrative problems? Illustrate from your own experience.
- (3) How far does the Lippitt and White analysis coincide with Burns and Stalker's? In what respects does it differ? Illustrate from your own experience of schools or other organizations. Discuss the advisability or otherwise of using the word 'democratic' as a descriptive title in this context. (Various references given for accounts of Lippitt and White's experimental work)

PROCESS

The thinking behind my wish to experiment with syndicate techniques may be summarized as follows.

In the first place the dominant patterns of teaching and learning between the ages of eleven and sixteen (and frequently over a considerably longer period) tend to establish two assumptions in the pupils: that the main function of the educational system is to impart information and techniques to the pupils; and that the characteristic relationship of teacher to pupil is one of command: the teacher orders the pupil to carry out various instructions, to acquire certain information, to practise certain skills (cf Fransson 1977; McKeachie 1961).

Second, the usual forms of teaching in higher education — lecture, discussion and seminar — tend to be interpreted by the student in terms of the assumptions stated above. Efforts by teachers at this stage to prompt students to 'think for themselves', to develop a judgement and critical insight of their own, are accordingly often frustrated (HM Inspectorate have recently made similar comments (DES 1981)). It should perhaps be added explicitly that students' rejection or neglect of the teacher's authority in matters of conduct and discipline must be sharply distinguished from their attitude to his authority *in his subject*.

Third, the effect of the syndicate form of organization is to cut across the assumptions stated above, in several ways. First, the students are now placed

in a situation where in the first instance they form views derived from their reading and experience and from discussion with their peers, rather than from the teacher. Second, the students form bonds within their syndicates which give them some support in the face of the teacher's authority. Third, the relationships are no longer controlled by the confrontation of the teacher with a number of separate individuals and can thus become more easily personal and informal. And fourth the number of members in a syndicate is in my organization limited to six and hence the relationships that form are likely to result in the personal 'involvement' or 'commitment' of all members in the preparation of material and the forming of views (cf Fransson *ibid.*; Argyle 1972).

Evidence was obtained on the above from two sources: two questions were set in the final examination which required the interpretation of certain features of the course; and an anonymous questionnaire was answered by all students attending the penultimate day of the course, after the final examination had been sat. Findings derived from American experience are not necessarily valid in any other context, nor those drawn from one teacher's experience valid for others. Nevertheless, the material is revealing, particularly as no discussion was given to the principles underlying the class organization until after the examination and the questionnaire had been completed. The relevant questions in the final examination were the following.

Qu. 5. Compare the influence of the syndicate on its members with the influence of an adolescent peer-group on its members, in regard to: (a) conformism; (b) integrity; (c) intellectual stimulation; (d) academic work.

Qu. 6. Analyse the organization of this course in regard to (a) authority structure (or faculty/student relations); (b) relation of the course-work to your personal and/or professional experiences; (c) the development of an independent attitude on the part of the students to the material offered by the lecturer.

Below are protocols drawn from the above sources.

Relations within Syndicates; Student Involvement

'The adolescent peer-group makes conformity one of the premises upon which it is built, and continues to thrive. It is essential that the teens and the group have the same likes and dislikes, otherwise they can look forward to the quiet solitude of ostracism. ... In a syndicate such as of the type used in this course, it is *not* necessary for the group to think as one. Of course, in general agreement is nice, but it is not essential; no member will be ostracised if he takes a dissenting opinion from that held by the syndicate in general. ... I wouldn't say that the people in our syndicate

were stubborn; they weren't. I would say that when any of us was quite certain that he (or she) was right about something, he stuck to his opinion. However, we always tried to keep open minds to empirical evidence that would either confirm our opinions more solidly, or even give valid cause for doubting them.'

'When we "hashed" over a question in our syndicate, there was always someone (usually me) who didn't agree with the group. This gave me a chance to express my views as opposed to the others. There wasn't the usual conformity one finds in the other classes — here we were in small groups "hammering" out answers to specific leading questions. And we were able to raise questions about other groups' answers as well. ...'

'The organization of this course has provided for the development of individual attitudes. ... Since the quantity of the material covered such a wide scope, independent attitudes almost had to emerge as different members would experience different books and personal experience.'

'This course, more so than most, demands independent thinking on the part of each student. As the material was offered by the lecturer, by reference reading and by group reports, there was a need to analyse our personal attitudes, beliefs, values, etc., and then to evaluate and constantly re-evaluate these attitudes, beliefs, and values. ... Also, as conflicting reference material came forth and conflicting views arose in the class, independent thinking and then independent attitude was naturally the resultant.'

'Much of the class time was spent in small group discussion to which the members of the group developed loyalty (this was expressed by members of our syndicate) and felt a responsibility to do their part and even to explore further books and relate class work to work previously taken. As a result an independent attitude was developed by many of the students who went out and purchased some of the suggested books or read parts of them in the library, going beyond the minimum standards set by the professor and the group.'

'When one works alone he may tend to procrastinate some of his school work, but because everyone else did their work, no one wanted to feel badly by not doing his.'

'The syndicate as a whole feels that academic work must be completed in the best possible manner. It is felt by members of the group that a sloppy job will reflect back onto the whole syndicate, and that the syndicate will feel that the person who did the sloppy job has let them down. For this reason, most syndicate work, even if done individually, is superior to plain individual work.'

It is noteworthy that these protocols do not indicate any undue pressure from the syndicates on the individual members, or any complaints of 'passengers' not carrying their full load.

Relations between Lecturer and Students

Question 3 of the questionnaire asked: 'Do you consider that the relations formed between lecturer and students during this method of working differ in any way from those formed during a lecture/discussion course?' To this question eighteen students replied that they thought that relations were 'closer' or 'more personal' ('the lecturer got to know us better as individuals'; 'I feel this syndicate method created a warmer feeling between teacher and students'), while six said the relations were about the same and thirteen made various other comments.

'In this course I believe that we have an organic ... authority structure. We have a leader who co-ordinates our work and guides our thinking and planning, yet the hierarchy has become blurred as in an organic structure. We are, therefore, allowed much individual or small group autonomy which in Thelen's thinking makes for a good authority set-up. Also along Thelen's line of reasoning, the leader interrupts this autonomy only when it is in danger of becoming erratic. There is good rapport with the groups and their leader and thus a good climate for productive work has been established. ... In my way of thinking [the professor's] statement about an independent attitude on the part of the students to the material offered by the lecturer would pertain to the rather autonomous situation under which we have worked in this course. In other words, we are not bound only to the lectures, but we have an opportunity to do individual research. This condition, I would think, is very conducive to a good climate of intellectual activity.'

As a result of the processes described above I believed — from my earlier experience of small group techniques — that the students would be likely (a) to work with greater energy and get more satisfaction; (b) to read with a clearer awareness of what they wanted to find out; (c) to learn to express their views more effectively on academic matters; and (d) to derive an intellectual stimulus from the clash of opinions in the small group.

With regard to the first of the above items, two questions from the questionnaire are relevant. Qu. 4 read 'Do you consider that you have worked harder/less hard/about the same as in a lecture/discussion course? Twenty-two replied 'harder' and two 'less hard', while thirteen said 'about the same' or were undecided. A number of those who replied 'harder' added something to the effect that 'it seemed less hard because of the circumstances'. Another question asking whether members had derived more or less satisfaction from the course than from the normal lecture/discussion course, or about the same, gave twenty-one reporting 'more',

eleven 'less', and five other responses. Taken together these figures suggest that the students worked harder on account of their involvement with the group and its work but felt less pressure and more satisfaction on account of the correlated improvement in motivation.

With regard to item (b), on purposeful reading, question 5 in the questionnaire is relevant: 'Do you consider that you have used books more or less effectively or about the same?' Replies were: more 25; same 10; less 2. One respondent commented, 'at first it was as I usually did — but now I am much more critical and seem to know what to look for.'

The fourth item (d) attracted a number of relevant protocols:

'This group ... has stimulated all of us intellectually. So many more ideas and concepts are brought out when discussing in an informal situation than being alone to think or in a large group. ... Someone was always there to refute or elaborate on someone else's ideas in a frank, positive, manner.'

'There was so much *more* information gotten, talked over, argued out. ... Our syndicate may not have had the most "ability" in the class, but we sure achieved as much as was possible. ... So this experience into group work (and my first sociology course) was a real awakening.'

'Members of syndicates, by working together, learnt more and, in my own case, worked harder than if the course had been organized in an autocratic manner.'

'Intellectual stimulation within the syndicate is exceedingly high. This is due to the cross-exchange of ideas, debate, and the attempt to reach a conclusion. Members are willing to volunteer information, read and discuss in order to gain increased insight into the material at hand. ... We are attempting to reach a goal and there is co-ordination and co-operation within the syndicate.'

'This entire course has triggered in me a want and motivation for research, references, and critical thinking, which is developing for the first time.'

PRODUCT

From the above argument I calculated that academic knowledge should not decline, while powers of judgement should improve. With this the bearing of the academic study on new situations and on professional experience, in areas appropriate to the subject matter, should be more clearly perceived. This view, expressed at the time, makes no attempt to analyse 'powers of judgement', and the material contains no objective data on the subject.

I had no yardstick of earlier acquaintance with this class by which to judge any changes in academic knowledge or powers of judgement. However, I had throughout the course been at pains to explain the criteria that

underlay my comments on syndicate reports and to emphasize that I was looking not so much for accurately memorized information as for the appraisal of evidence, the clear delineation of concepts and the analysis of the bearing of the academic study on first-hand professional experience and problems. The students' scripts were in fact impressive for the clarity of their grasp of the relevant concepts and for the quality of the analysis, both in relation to their first-hand experience and in the differentiation of adolescent peer-groups from syndicate peer-groups (in question 5) and of normal school authority structures from those of the syndicate-based course (in question 6). There was no indication of any lack of command of the information either on peer-groups or on authority structures that was needed for answering the questions.

APPENDIX

Indicators of Student Involvement

The most striking feature of syndicate work to a newcomer is the intensity of involvement that develops in many syndicates. This, as was mentioned in Chapter 1, shows itself in various ways. The evidence already quoted in the present chapter is amplified by the following protocols, drawn from the videotape made at Bede College, Durham.

'You could find two or three syndicate groups going away and just discussing it for another hour over coffee, which you don't find after a lecture — people just wander out and go and do whatever they were going to do next.' (Student)

'I think we really spent much more time on the syndicate work if you did it at an average level than one would spend on an essay because it just seemed to be more interesting and we seemed to get more out of it. I would say we did more work.' (Student)

'Well, I think first of all the amount of ground that was covered was significantly less than would have been covered in a formalized teaching way, but the learning has been more thorough and many students work far harder under these circumstances than I would ever have suggested asking them to do.' (Tutor)

The point about syllabus coverage must not be overlooked: many academic teachers attach more importance to this aspect than to the growth of commitment or the development of higher order skills.

The intensity of involvement shows itself also in the range of reading in which the students engage, as has already been illustrated, and is endorsed in the following protocols.

'I think a definite advantage of it was that a lot of students just

read one book or two books and they'll read that and perhaps make notes, but the advantage of this course is that you've got such different books each week and you've got a much wider range of reading. Not only the books you've read but the books other people have read.' (Student)

'I find it gratifying too that when we were discussing the question, instead of the students having looked at maybe one book or two we had a syndicate there who between them were at least acquainted with between 10 and 15 sources.' (Tutor)

Not only does one get repeated reports on the above lines but as Newhouse comments, 'One variable in the teaching process which has received scant recognition in this account because of its extremely subjective nature, is the sheer enjoyment that this course brought to both tutors and many students. It is unusual for students to talk and write of *compulsory* education courses in terms of enjoyment and the very rarity of such comments makes them all the more welcome and significant...' (Newhouse 1978).

Evidence of this kind suggests that a syndicate-based pattern of work may have important implications for the development of continuing motivation (Maehr 1976), particularly in relation to subsequent in-service study (Houle 1980, see also Chapter 4).

Students not only read more widely but with a greater sense of purpose. That aspect is illustrated by some of the protocols in the earlier part of this chapter and is supported by the following:

'I found my reading was guided because I was reading to answer the question instead of reading and hoping that I could answer the question at the end of it. I was reading more intelligently. By the time I had finished I was reading both more intelligently and more quickly, and I was making better notes.' (Student)

A Shift Towards Deep Active Processing

One of the features of the syndicate process that strikes the observer is the shift in emphasis from the assimilation of academic source material to the active construction of views, taking into account the evidence and the arguments offered by the sources and building this material up into a structure that satisfies both the participants and the nature of the topic.

'One of the good things about this method is that it's not just one person seeking out information and then imparting it to the whole lecture group, but you have four or five different people who are going out and seeking information along their own tack and then coming back to the group and then explaining round the group and discussing from four or five different points of view.' (Student)

'I think this is the big gain for me. The onus is very much on the students to deal with the concepts involved. We had small syndicates of students and we were tossing around sociological ideas, trying to form judgements, trying to sift the evidence and formulate ideas and reject this idea or that idea ... trying to formulate some idea which would meet all the requirements of the evidence. We were involved in academic discussion and this came very much from the syndicate method.'

(Student)

The following protocol records an observation on the students' development of an appreciation of the provisional nature of their academic knowledge.

'I think there are two main things. There is a gradual development of a more mature attitude towards learning where there's a greater independence and where one starts to learn about small group work and how one works with a group of people. The second thing is that the learning seems to be more part of a student's personality in as much as he seems to have learned so thoroughly that he carries it with him and can apply it immediately ... it is a part of his total make-up. I think this is the thing I have observed. I think one thing is that they are exposed to a variety of sources which initially can be confusing, particularly if there is conflict between the various sources. But the process then becomes partly concerned with the idea that maybe there are no absolutely right or wrong answers and one has to make a judgement in an independent sort of way. Books can make mistakes, for example, and teachers can make mistakes, and these things lead to a much more mature and independent attitude in getting information and evidence weighed and coming to conclusions about particular aspects.'

(Peter Glew, videotape)

These protocols illustrate vividly the active collaboration in the academic tasks of analysing, sorting and synthesizing the source materials. They also convey vividly, as do several of those quoted in the earlier part of this chapter, the sense of 'personal meaningfulness' which develops (Fransson 1977; Steinaker and Bell 1978; Ford 1979; Entwistle 1980; Wilson 1981). One is reminded of the student report quoted by Entwistle et al. (1979) to illustrate a 'deep active' approach to study: 'Whilst reading the article, I took great care to understand what the author was getting at, looking out for arguments and facts which backed up the arguments. ... I found myself continually relating the article to personal experience, and thus facilitated my understanding of it'. It is noticeable in addition, as one follows a syndicate discussion, that when the assignment asks students to refer to their personal experience they engage in cross-comparison not only between their different individual experiences but between these and the cases quoted

in their sources, with the result that the generalizations of academic theory become interwoven with the elements of experience, whether first-hand or vicarious. The individual's understanding of the material is amplified and enriched by the contributions of his colleagues, and ideas which are fresh to individuals are sparked off by the members jointly in the course of the debate. In the process students may find themselves attempting to articulate personal impressions, unvoiced perceptions and assumptions about values which they have not previously undertaken in a context of systematic academic study. The intimate debate often also prompts students to re-cast or re-phrase the source material in the language of the peer-group, so that the formal language of an academic text is brought into a close relationship with the everyday language of the peer-group.

The above features of the syndicate process may be drawn together under the single concept of 'culture': the syndicate group forms a culture of its own, a constellation of shared meanings or perceptions, within which there is an interplay between the material of the academic sources and the material of personal experiences, mediated by the language of the peer-group (cf Cornwall 1980).

The juxtaposition of varied source materials and varied student backgrounds lends itself not only to divergence from a tutor's preconceived pattern of thought but to the marrying of data and concepts drawn from different disciplines. The potential of a syndicate-based organization for inter-disciplinary studies has not as yet been much exploited; the great advantage is that the integration of the diverse materials has more chance of taking place in the minds of a syndicate team arguing out a common view than in the looser, less intimate discussion of a seminar or in the solitary thinking of the individual student.

It will be clear from the evidence recorded in this section of the chapter that syndicate-based work has repercussions on the professional experience of the tutors as well as the students. As will be seen later (Chapters 5, 10, 11, 12, 13) the relation between the tutor(s) concerned in a syndicate-based course and the institution and/or department in which the course is held is highly significant. It is necessary therefore for the responsible individuals, in assessing the overall impact of the course, to take into account not only the facts and concepts learned by the students, the higher order cognitive skills they have developed, and the extent of change in their commitments, but also the influence of the experience on the tutor(s). Such an overall appraisal or evaluation needs to be planned for in the original course proposal. The psychometric approach based on the definition of behavioural objectives and the use of standardized tests is — as will be seen in Chapter 10 — not a very appropriate technique of evaluation for such work and it is likely to be more fruitful to adopt the 'illuminative' method advocated by Parlett and Hamilton (1972), in which an evaluator assembles evidence not only from tests and questionnaires but from interviews and other informal sources, and assesses the overall influence of the scheme under review.

3 STUDIES IN FRENCH LITERATURE

Colin Evans

The distinctive features of the course described in this chapter are: the ideal size of a syndicate appeared to be about seven; the membership was until recently decided by the tutor, who also appointed a chairman and secretary on a rotation basis, with specific guidelines for their jobs; membership is now based on affinity groups. The consolidation phase was handled by means of oral reports from the syndicates at a plenary session chaired by the tutor. An example of an assignment is given. The author reports the students' improved grasp of their material, their committed attitude to the preparation for meetings, and the greater range of student participation in the student-led discussions as compared with tutor-led discussions. (Editor)

THE ORGANIZATION OF THE COURSE

What follows is an account of some of the teaching I have been doing in Cardiff for the last four years. It refers in particular to a course on Sartre with second-year students and to a course on critical theory with final-year students. It also draws on discussions about two similar courses taught by a colleague, one on Molière (second year), and one on Nathalie Sarraute (final year).

Experience has shown me that the organization is crucial: students need a very clear structure: rooms, times, dates, names, tasks must all be worked out precisely and published in advance. One cannot fall back on the institution's structure. Any confusion or vagueness ('find a convenient room') is fatal to confidence.

I divide the class into a maximum of four groups. The ideal size seems to be about seven, although some of the best groups I have observed have been smaller. There seems to be a relationship between a group's skills, its size and the amount of disparity it can integrate. There are various ways of constituting the groups. In the beginning I chose the worst one — alphabetical order. Not only does this produce an inadequate cross-section of the class but, as students have pointed out, they are divided into groups in this way throughout their careers. Abercrombie has always been in a group with Bourdieu and never with Rogers or Rudduck.

I have usually constituted the groups myself, using what knowledge I have of the students and aiming for maximum heterogeneity. However, this year I used affinity groups, asking the class to divide themselves into groups by signing their names on the board. This now seems to me the best solution.

When the groups are constituted I nominate a leader/chairman and a secretary/reporter for each small group meeting. My aim is that each member of the class should be chairman and secretary during the course. For the first two meetings I also nominate two observers. I make it clear in the documents and at the first meeting of the class that the chairman is responsible for his or her meeting. I formally hand over this responsibility. If the chairman is unable, through illness for example, to be present he or she must inform the group and make sure there is a replacement.

The chairman may well be better informed than the rest of the group on the topic to be discussed at his or her meeting but the chairman's role is not the traditional one of presenting a student paper to a passive audience. The chairman's function is to assist the group to perform as well as possible the set task, using the participants' resources — information, personal skills and creativity — to the maximum.

The secretary has two specific jobs. One is to give a brief oral report of the group's conclusions to the whole class, speaking from notes displayed on an overhead projector. The other is to produce a more detailed written report which I see and annotate before putting in the class file (together with a photostat of the OHP notes).

During the small-group meeting the secretary will frequently ask the chairman for clarification and the group will frequently ask the secretary for a progress statement. If the group uses the chalk-board (which students are very reluctant to do at first, the board being seen as the territory of the tutor), a 'scribe' is appointed, other than the secretary.

Suggestions are issued to students as to the roles of the various members, as shown below.

Role of Group Leader

- Prepare topic and plan meeting.
- Introduce topic.
- Check that group understands task.
- Suggest procedures.
- Collect all available information and ideas from group (including more reticent members).
- Sum up from time to time. Clarify.
- Check amount of consensus in group.
- Direct discussion to final aims.
- Be aware of time constraints.
- Select scribe to collect ideas etc. on board when appropriate.
- Sum up at end for group and secretary.

Role of Group Member

- Be prepared.
- Be audile.
- Listen actively.
- State views, opinions, ideas, interpretations, problems.
- Give information, evidence, proof, explanation.
- Seek information, evidence, proof, explanation.
- Express support.
- Express and justify disagreement.
- Build on others' ideas.
- Comment on group's progress and process. Direct or redirect it.
- Sum up or rephrase or clarify.

Role of Group Secretary

- Keep notes. Select key words.
- Check with leader agreed formulations.
- Produce transparency.
- Produce report.
- Speak on behalf of group.

Role of Group Member (cont.)

- Link each contribution to what has preceded.
- Use board when appropriate.
- Be aware of time constraints.

INPUT

Tasks

There are two essential prerequisites for the method of work. (1) The group *must* have a very precise task or set of tasks ('listen', 'discover' ..., 'compare' ...). General topics ('discuss' ...) are unsatisfactory. (2) The group *must* be required to produce a report: in the absence of this goal they will go around in circles, despair and reject the system. Completely non-directive discussion as practised by Carl Rogers (1961) cannot, it seems to me, work other than within the strong boundaries of an intensive residential course and even then the risks are considerable. It is also incompatible with the rest of the system — examinations, degrees, etc.

An example of an assignment follows.

Private study

Produce four pieces of writing as indicated below. Each piece should be written on a separate sheet of A4 paper, one side only, and headed very clearly A, B, C or D. Put your name on the sheets if you wish, though this is not essential as they will not be collected for marking but will constitute material for the next seminar discussion.

- A — A page of the biography of a well-known person (this piece could be copied or photocopied from a reference book or a published biography. It could be a 'potted' biography or a page from a larger work).
- B — A page describing a fictional character (invented by you).
- C — A page of your autobiography (not necessarily the first).
- D — A page of your private diary.

Group work

(NB The group should start by checking that everyone knows everyone else's name)

Each group is asked to examine examples of A, B, C or D. The task is to ascertain, from this examination and from individuals' experience of writing this particular piece, what the characteristics of this form are. The following questions are given as guide lines for discussion but the group may wish to add further questions.

Attitude to reader?
Purpose in writing?
(Entertain? Instruct?)
How revealing of writer's feelings. Confessional?
Principle of coherence.
What <i>orders</i> the text?
Chronology?
Verifiability?
Objective, factual truth.
'Well-written'?
Literary?
Explanation or understanding offered or sought?
Principle of section. What determines inclusion of detail or incident?
?
?

Report stage

Each group reports its findings. The whole group will attempt to assess what features are common to all four forms and what are the distinguishing features

PROCESS

Tutor's Role during Group Work

I have hesitated about my role during the group meetings. Initially (to my surprise) I experienced feelings of exclusion: thirty students all working on the subject, discussing and learning, I should have been delighted. I now feel that for me this was a necessary transition stage. We are so accustomed to domination (and students to being dominated) that it is essential to absent ourselves at least for a while. Most accounts of syndicates show the tutor moving around from group to group, listening in or giving advice. I have found this unsatisfactory: it disrupts the group, removes their authority and prevents me from actually following the dynamics of any one session.

I now sit in on one group, as an observer. In this way I see each group at work two or three times during the ten week course. If a group has difficulties I can, of course, give it more attention.

Initially I would remain completely silent in my corner (again as a necessary discipline for myself). Now I have a technique of offering, very briefly, very occasionally, some suggestion, usually procedure, to the group which they may use or not as they wish. I avoid being brought into a discussion. Early on in the course my presence certainly inhibits the group: later, students ignore me quite successfully.

Report Stage

Whether the report *has* to be oral as well as written is another question. A colleague dispenses with the oral reporting, and it has been pointed out to me that my insistence on the oral report stems from my need to control the whole operation and to be seen to be controlling it. There are alternatives to the plenary report session such as group interviews (Rudduck 1978a) and at a recent conference I had written reports displayed on a notice board. However, in the context, I feel the report stage is justified: (1) it gives the student secretary practice in a basic skill; (2) it demonstrates the existence of the whole class as a group; (3) it actually does perform the communicative function of pooling information, approaches and insights, dramatizing the need for this as well as the difficulties inherent in it. I have used a variant where the secretaries have an extra meeting and produce a joint report.

I chair this meeting, listen to the reports, check with the group members that they approve of them, get other groups to seek clarification, ask for it myself. Then I attempt with the class a synthesis. This is easier when all the groups have had the same task, harder if, as is usually the case, they have worked on different aspects, on a labour-sharing basis. In either case each group will have evolved its own vocabulary for discussing a topic: I collect items of this vocabulary on the chalk-board and get the class to ask themselves to what extent they are interchangeable. For example, a recent report stage on Sartre produced from four groups the following descriptions of what a character was aspiring to: authenticity, certainty, solidity, existence, identity, identification, reality, substance, weight, image. The process of getting members of one group to see that members of another group are referring to the same phenomenon with a different vocabulary (or, conversely, that the same vocabulary can refer to different perceptions) or that one term is actually preferable to another, this is one of the fundamental aspects of the 'practice of the discipline' (Broadbent 1977).

I also try at this stage to make any differences of opinion in the class more clear-cut and to dispel the notion that anything other than a consensus is in some way a failure.

This whole negotiating process is delicate and difficult and I am not as good at it as I might be. It is very different from the lecture situation where one individual's map of a cognitive and conceptual territory, one individual's vocabulary and structure, one individual's *schemata*

(Abercrombie 1960) are simply *presented*, without public negotiation, and where the lecturer has already done his processing, where he is not called upon to listen and where students are presented with a *finished product*.

Lectures

I give about three lectures in a fifteen-hour course. I start from what I have learned from listening to the students working and I try to remove conceptual blocks, fill in information gaps, point out important aspects they have missed, develop creative ideas they have had.

At first I thought the lectures would be resented: 'Now *he* comes and tells us how to do it.' 'Why couldn't he have told us that in the first place?' In fact the lecture seems actually to be *wanted*. They are by then an informed audience and they listen rather as one reads the report of a rugby match one has watched. This contrasts strongly with a short lecture course I give to a large first-year class where the students' assumption is clearly that you don't read the text until the lecturer has told you what to see in it. (A survey at the first lecture showed that 50 per cent of the class had not started the text, 25 per cent had only read a quarter of it.)

PRODUCT

What are the objections to this method? A major one is that I am undoubtedly teaching a 'hidden curriculum'. In addition to my official objectives (eg 'Students should have information about the understanding of the work of Sartre') I have unofficial ones ('Students should develop skills, should be able to lead a meeting, participate effectively in a group, give oral and written reports'). But I have neither the time, nor perhaps the authority, to give the training necessary to meet these unofficial objectives, even less to deal with group dynamics problems which occur. Someone could well object: 'You're using the subject matter as a pretext for training students in certain skills, but you are not able to do the training officially, therefore it can't be done efficiently'.

My reply is that there is always a *hidden* curriculum, the medium is *always* the message and the message of an orthodox lecture course concerns dependency, passivity and false security.

I think it is possible to foreground the subject-matter but still to make explicit the skills and the hidden curriculum. Therefore I give out lists of the functions of chairman, secretary and participant; I suggest procedures for organizing meetings (for example: pool all information first and display it); I give a written report on the meetings; I observe and I talk informally after a meeting about 'how it went' (as a coach might after a match); I make at least one videotape of each group which we watch and discuss together. I have taken a group of students for a residential week-end on group work. All this is far from systematic but outsiders watching the students at work do perceive them as being 'trained'. At a recent conference, a group of these students were joined by a student from another university for a

student-led group. At one stage this student was asked by the 'secretary' to rephrase and clarify something he had said. His reaction was defensive: he assumed he was being attacked. He found it hard to adapt to a group whose ethos was basically collaborative and not competitive.

Another objection is that for some students the switch from isolation and dependency to autonomy in a group is difficult if not impossible. The sense of panic at not receiving authenticated, authoritative answers, of not knowing whether they are 'on the right lines', the feeling that progress is slow or non-existent, that the ground is not being covered, that I, their paid official guide and interpreter, have left them, bewildered and defenceless, in the jungle, that they are going around in circles, and that wild beasts (examinations) will devour them — these feelings seem to assail all students some of the time and some students all of the time. I sense on occasion a resentment that I have broken some kind of unspoken collusive pact in asking them to take responsibility for their own learning.

It has to be admitted that with this method there is no way that the 'ground' will be 'covered' as systematically and as comprehensively as with a well-planned, well-delivered lecture course. The sense of order, of closure will be lacking. There will be useful insights of mine, or pieces of information or ideas which will not emerge. Students will make errors which will go uncorrected. 'I teach my students more about Sartre in the time' is a fair comment. My reply can only be, 'yes but do they *learn*, really learn more about Sartre in the time or over the years?' The satisfaction of *teaching* a coherent, systematic course, of controlling a vast amount of material, is very great for the teacher and he undoubtedly learns a lot, improves his own skills, his self-esteem and so on. His own satisfaction, his own learning can obscure the fact that he is giving students *results* and they do not see his process; they need to experience the confusion and the creation. No one will improve his tennis by watching Borg on the television.

On the positive side, I think I can state that even if students end up *knowing* less (which is by no means proven) most of them *understand* more because what they know has been integrated and made meaningful. Their preparation is more diligent; they are far less likely to come to a student-group unprepared than they are to a tutor-led group. In a word they are more *motivated*.

They do learn communicative skills which I believe are vital, skills which in a conventional lecture or seminar situation are the exclusive reserve of the tutor (as if only the coach has the right to volley or lob or check the net).

I once did a comparison. I conducted a seminar myself with fifteen students (the size group I would have had in the normal system). In other rooms two student-led groups (seven in each) worked simultaneously on the same topic. The sessions were videotaped (at the cost of some strain on the Centre for Educational Technology). I subsequently analysed each

group, using a modification of the interaction grid developed by Neil Rackham (1977). Whereas in my group there were students who made no contribution throughout, students in the other groups all contributed and contributed more, (a) because the groups were smaller, and (b) because I was not there. (The ideas were also much more diverse and varied, though this is not strictly relevant.) Although I tried to run the seminar non-directively, nevertheless I was virtually the only member to practise certain behaviour — rephrasing, summarizing, making procedural suggestions. In the student-led groups the total number of such behaviours was greater; the chairman still used them more than other participants but students were also using them. Tables 3.1 and 3.2 give the data.

	Tutor	Students																Total
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O		
Seek information	8	1	2												1	2	14	
Give information	3	2	2	3												1	11	
Make procedural proposal	7	1	1														9	
Support															1		1	
Give opinion	1	1	3					1		1		1	1	1		2	12	
Build															1		1	
Express agreement			2												2		4	
Express disagreement		1	2	1													4	
Summarize	8	1	1														10	
Rephrase	5																5	
Total	32	7	13	4	0	0	0	1	0	1	0	1	1	1	5	5	71	

Table 3.1 Tutor-led seminar

	Students						Total
	A (chair)	B (sec.)	C	D	E	F	
Seek information	8	2			5	2	17
Give information	5	1		12	7	3	28
Make procedural proposal	8	1	1	3	5	5	23
Support	4			1			5
Give opinion	3	2	1	1	5	5	17
Build	1			1	2		4
Express agreement	3		1		4	3	11
Express disagreement					7	3	10
Summarize	4	4			1	2	11
Rephrase	1				1	1	3
Total	37	10	3	18	37	24	129

Table 3.2 Student-led seminar

My conclusion is that in conventional tutor-led seminars students assume that a whole range of behaviours are (like writing on the board) not their business. Students hardly ever say 'What you're saying is ...' or 'I'd like X to say what she's thinking ...' or 'I think we ought to abandon this line of inquiry' or 'Why don't we collect all the information first, then collect different interpretations?' All this is deemed to be the tutor's role. Students are left with giving opinions or seeking or giving information.

In the experienced student-led group, students use a wide range of behaviour and in particular a building behaviour: in conventional seminars the assumption is, I think, that no idea can be expressed unless it is completely formed and hardy (which explains the painful silences); in a good

student-led group members will refrain from saying something which at that moment is inappropriate or untimely but they will also produce ideas that are half-formed, since they know that these ideas will not be shot down in the name of the survival of the fittest but taken up and built on ('What you're trying to say is ... and I've noticed something in the text which seems to confirm that ...').

Finally, of course, the positive advantage is the achievement of confidence, a sense of personal authority within a working group, a sense also that one does not have to be everything because others can be what you are not. Students learn that many heads are better than one if the structure is right, that they can collectively make sense of difficult texts, overcome opacity, integrate and build on disparity and diversity, vanquish frustration and failure without recourse to an authority figure other than for the tools, resources and secure structure with which to do the job.

I see student-led groups as providing the autonomy, independence and self-confidence typical of the Oxbridge system but with a collective, collaborative group ethos which I believe is more satisfying, more effective and more appropriate to the world we live in than the essentially solitary, individualistic ethos of the older universities. In the last analysis it's my answer to the question: what is an arts degree for and why should I be paid to prepare people for it?

The method seems particularly appropriate for an essentially divergent discipline which deals with relationship, communication, words, feelings, imagination, language, where there are no right or wrong answers and where factual knowledge is not the main objective.

To what extent it is applicable to other disciplines, notably scientific ones, is not for me to say but for others to discover.

4 A NEW MEDICAL SCHOOL IN AUSTRALIA

Rufus Clarke

In the course reported in this chapter the syndicates had eight members, selected by the staff; each syndicate had a tutor attached as a consultant. Tutors were local practitioners or faculty members; all the tutors had a short training in the guidance of group processes. The assignments were based on clinical problems. Consolidation usually took the form of an informal review of the problem with the syndicate tutor; the specialist staff could be called on to act as 'resource persons'. Students were usually assessed by means of 'Modified Essay Questions', which are sequences of short-answer questions based on clinical problems. Various evaluations of student responses have been made, indicating appreciation of the collaborative approach to study and general support for the system. The syndicate pattern of organization has, however, functioned less effectively in the third year of the course, for reasons not yet positively identified. (Editor)

THE ORGANIZATION OF THE COURSE

The Foundation Dean of the faculty (Professor David Maddison) was appointed in 1975 with a mandate to develop a course which would seek to avoid the major perceived weaknesses of the conventional medical curriculum (Maddison 1978). Since the strategies to overcome these weaknesses included increased student participation in learning, increasing student independence in preparation for lifelong self-education, and better understanding of and skill at interpersonal relationships, it was natural to look at the potential of small groups as a major educational setting. This theme was developed in a faculty Working Paper (Faculty of Medicine 1977a), which summarized the objectives that could be met by working in groups. These included:

- a Certain of the faculty's *Programme Objectives* (Faculty of Medicine 1977b), in the areas of observing behavioural phenomena, developing personal qualities and attitudes, and practising interpersonal skills.
- b *Study Objectives*, including giving and receiving moral support, help in relation to learning, and help in relation to assessment, and also broadening and internalizing knowledge.
- c *Group Effectiveness Objectives*, learning to tolerate differences between individuals, to apply group dynamics and to give and receive criticism.

- d *Task-oriented Objectives*, learning to evolve team goals, to collaborate in the solution and management of problems and to evaluate the outcome of team work.

The five-year Newcastle curriculum is integrated, with no division between pre-clinical and clinical phases, and is under the control of an Education Committee, which is the final arbiter of what is to be included in the curriculum. Students learn from the outset of the course through confronting and 'solving' a series of clinical problems, with explicit emphasis being placed on the strategies of problem-solving, on identifying the new knowledge and understanding that they require to solve or manage the problem, and on acquiring and applying that knowledge and understanding. These experiences are designed to develop the student as an independent learner, and they take the place of traditional lectures and practical classes, which are almost non-existent in this curriculum.

The curricular structure consists of three interweaving and integrated longitudinal strands: predominant is *Clinical Problem Solving* (approximately 65 per cent of study time), in which students identify and acquire appropriate knowledge and understanding through confronting a number of clinical problems. This activity starts in the very first term of the curriculum; there are no preliminary or 'foundation' courses. The second strand is *Professional Skills* (approximately 25 per cent); this again is present from the outset and comprises clinical skills such as interviewing, physical examination and counselling, and other areas such as professionalization, ethics, scientific method and critical thinking. The third strand is *Group Medicine* (approximately 10 per cent); this connotes the aspects of medical practice that relate to groups or communities as distinct from individuals: for example, the evaluation of health services, the identification of groups at risk, strategies of primary prevention and health education.

INPUT

The groups of eight students (eight groups make up the annual intake of sixty-four), are the same for all curricular strands, and stay together for one year. Their composition is determined by the faculty, because doctors have to learn to work professionally as members of a group, and are not able to manipulate the composition of those professional groups. They must, therefore, learn how to work co-operatively within groups, how to acquire group-building skills, and how to dissolve the ties of a group at the end of its life. The groups are stratified with respect to sex, school-leaver/mature entrant, and admission category (academic achievement alone or multiple criteria including personal qualities — see Vinson, Cooney and Turnbull (1979) for details of the faculty's admissions policy), but no account is taken of any other personal factors in determining the composition of groups. Each group has a different tutor for each strand (sometimes two or three for Professional Skills); tutors are full-time or part-time members of the

faculty (both medical and health professional), who are not expected to be experts in every facet of the curriculum. Tutors undergo a very limited (about six-hour) training programme, with follow-up sessions during the term. Training consists of group sessions whose major focus is to examine the process of groups; the content of the specific problems receives less attention in the training programme. Each full-time faculty member performs as a tutor for one term each year, to maintain contact with the realities of learning in groups.

The 'expert' role resides in Resource People, who are identified faculty members with special knowledge and expertise (eg in anatomy, epidemiology, sociology) upon whom students are encouraged to call when they identify the need. It should be pointed out that the faculty is funded according to the formula which obtains for all Australian medical schools, resulting in a (notional) student/staff ratio in this school of 8:1, which is poor by British and North American medical standards.

PROCESS

This report focuses on group activities in the major curricular strand, Clinical Problem-Solving.

Each group is scheduled to meet with its Problem-Solving Group Tutor twice a week for a notional three-hour session. The group stays together for the year, but has a new Problem-Solving Group Tutor each term. During the term the group has to consider a series of clinical problems, at the rate of about one per week during the first two years, and accelerating thereafter. The criteria for selection of problems (Faculty of Medicine 1977c) and the mechanics of developing the problems (Engel and Clarke 1979) have been reported elsewhere.

The problems are usually grouped according to body systems, eg cardiovascular, and are presented in writing or on videotape as a series of steps: initial meeting of patient and doctor, further history of present complaint, previous medical, family and social history, physical examination, investigations. After each step the group of students is encouraged to develop hypotheses about the problem, and to identify, before they receive the next step, what data they need to elucidate the problem. They then modify their hypotheses in the light of the further information (Elstein, Shulman and Sprafka 1978). During these discussions the tutor is encouraged to adopt a facilitating and advisory role rather than the traditional role of information source, and he encourages the discussion of ethical, psychological and social issues raised by the problem as well as elucidation of the 'hard science' aspects. For example, in one problem the patient is an agricultural worker in a remote area who complains of pain in the leg which turns out to be due to an arterial blockage. The problem develops in a way which encourages the students to explore why he delayed seeking medical help and why there was delay in treating him, as well as the mechanism of development of the vascular lesion and its treatment.

Ultimately it proves impossible to save his leg, which has to be amputated; operative procedures attract little attention (because operative surgery is a postgraduate undertaking), but the psychological management of the patient is emphasized, as are issues of social support and rehabilitation. As the problem unfolds, tutors encourage students to explore the avenues which open up.

Groups tend to develop their own procedures and mores, and this diversity is encouraged as long as it seems to promote the general goals of group work (Faculty of Medicine 1977a). Groups are also encouraged to use their own internal resources; about a quarter of Newcastle students have post-secondary educational experience, and a few students may have but a rudimentary scientific background, since there are no subject prerequisites for admission to the faculty. Thus the expression of personal viewpoints and experiences is encouraged (Collier 1966), and the tutor's viewpoint is but one contribution to the group.

The session should conclude with a tutor-stimulated review of those of the group's educational needs that have become apparent, backed by the issue of previously prepared objectives for the problem, together with study guides (which in the early years are relatively voluminous documents, since most textbooks are not written for this type of course). Groups may assign specific reading and reporting tasks to individual members.

Students then spend a substantial part of the rest of the working week on individual or informal group study in relation to the clinical problem, since there are few other timetabled activities. The total 'scheduled contact time' each week rarely exceeds sixteen hours. As a rule, student groups do not 'report back' to larger meetings on their interpretation or handling of the problems, although some plenary meetings are held for the purpose of reviewing the problem and its management.

The second problem-solving meeting of the week is devoted to identifying and discussing learning difficulties, and applying acquired knowledge and understanding to the solution and management of the patient's problem. Strategies such as role-play of doctor and patient are encouraged.

PRODUCT

Considerable opportunities for formative assessment are built into the problems. Summative assessment occurs at the end of each term (or two) and to date has been mainly based on the Modified Essay Question (Hodgkin and Knox 1975; Freeman and Byrne 1973). Students are given a brief written scenario, and are asked two major classes of questions calling for brief answers: 'What would you do next?' and 'Justify your decision', the latter testing grasp of the underlying scientific rationale for the clinical actions. More data are then given, and further questions follow. Each item is graded pass or fail, according to a predetermined Mandatory Level of Competence (MLC) which is given to the student body for comment (eg on ambiguity of questions, expected level of answer, alternative answers) soon

after the completion of the paper. Student comments on the questions and MLCs are taken into account by the assessors when they mark the scripts. Marked scripts are subsequently available for inspection by students. Other assessment instruments play a minor role, or are still in the process of development. An account of the evolution of the assessment system is given by Leeder, Feletti and Engel (1979).

The evaluation of working in small groups in Newcastle has been directed more to questions of efficacy than of efficiency. We have been concerned to establish 'Does it work?' rather than 'How well does it work?' Since our strategy was modelled most closely on the McMaster experience in the North American context, where medical students are already graduates of a college course and in their early twenties, we were repeatedly warned that such an educational strategy might not work with less sophisticated Australian students straight from high school.

Acceptability

We have made attempts to acquire evaluative data, most of which address the issue of acceptability. A survey was conducted at the end of the first year of operation of the school by a fifth-year medical student from the University of Queensland undertaking an elective in medical education (Colditz 1979). He received replies to a questionnaire from 50 of the 64 students, and interviewed 51 of them. In response to the question 'Why do you think you are expected to work together as a group for the whole year?', the goals identified by the faculty were frequently cited by the students. In answer to an open-ended question on the advantage of group work, more than half spontaneously cited moral support, help in learning, and collaboration in the solution of problems. Disadvantages mentioned by more than half the students were problems with group dynamics and lack of toleration of individual differences; less frequently cited problems included discouragement from independence, restricted access to other students in the year outside the group, and carrying the load for non-contributing members. These have also been identified as problems in other institutions by Collier (1969) and by Chambers (1973).

Subsequently, the tightly-knit group appears to function less effectively as the students progress through the curriculum, reaching a nadir in the third year of the course. There seems to be some improvement in the fourth year, and group work does not feature largely in the final (fifth) year. The major reasons advanced for the declining effectiveness of groups are wide variations both in the expectations and in the competence of the group members. Attendance tends to decline, and informal, self-selected groups sometimes spring up. The faculty has recently (February 1982) received some more objective evidence bearing on these impressions, and a review is under way.

For the earlier years, questionnaires administered to students at the end of the first year of operation (Feletti and Fisher 1978) and comparing

the experiences of first and second-year students after two years of operation (Feletti 1979) reinforced the wisdom of the faculty's decision to keep student groups intact throughout the academic year (85 per cent support). A majority of respondents indicated that the tutor's help was needed in resolving interpersonal difficulties, which were seen as the major obstacle to effective group function.

A recent survey (Feletti, Doyle, Petrovic and Sanson-Fisher 1982) of 81 per cent of the faculty's 1981 intake of first-year students identified (by factor analysis) the clusters of tutor behaviour that correlated with the students' overall perception of the tutor. The first factor, labelled 'caring for students,' accounted for 48 per cent of the variance; the next three (each accounting for less than 10 per cent) were: 'tutor knowledge of course structure and faculty philosophy'; 'encouraging independent thinking'; and 'knowledge of the specific medical problems'. This emphasizes, at least for the first year of the curriculum, the pastoral as distinct from the academic role of the tutor.

An earlier in-house survey (in 1980) generated a useful set of recommendations about how to strengthen the group process. They included an even greater emphasis on interpersonal relationships, better training of tutors, and more opportunities for groups to share experiences. There were no suggestions that groups should be abandoned.

Another piece of evidence about acceptability derives from a survey of student perceptions of the learning environment conducted in five Australian medical schools in 1979 (Feletti and Clarke 1981). The results of this survey showed clearly that students at this medical school perceived their school in a much more favourable light than did students of the other schools surveyed. Whilst this could be attributed to many factors, it implies a general level of satisfaction with the educational strategies adopted by the faculty, amongst which the emphasis on small-group work is one of the more striking. Sub-scales of the survey where differences between Newcastle and the other schools were particularly marked were 'flexibility' — the students' perception of the degree of control imposed on students — and 'meaningful learning experience' — the perceived relevance of the curriculum to the practice of medicine. The former can be ascribed, in part at least, to the use of groups.

A final piece of evidence about acceptability comes from the regular programme evaluations that are undertaken each term. Faculty members continue to rate their tutorial experiences as positive (and very few part-time faculty have dropped out), although some may be anxious and uncertain about their performance. General student evaluations do not often mention groups either positively or negatively, and the overwhelming majority react strongly against any threat to return to more didactic methods.

Academic Attainment

As foreshadowed earlier, no hard comparative data on *effectiveness* of

learning exist. In the six 'class-years' of experience so far, only one group has demonstrated pathology that was clearly reflected in the performance of its members at assessment. There is clear subjective and anecdotal evidence that considerable differences exist between groups in terms of their level of mutual support, warmth, productivity in discussion, etc., and many of the observations retailed by Beach (1974) and by Fransson (1977) strike a responsive chord in Newcastle tutors. It is clear that different tutors influence groups in different ways, depending on how far they are prepared to relinquish the traditional 'teacher' role, and on their diagnostic and management skills in group dynamics. But students are graded on a pass/fail basis, and this constitutes a poor outcome measure for documenting any association between group performance or tutor performance and student performance at assessment. The form of the Modified Essay Question, in spite of its name, does not encourage extended prose writing, and clarity of written expression is not easy to detect. Clarity of oral expression can be developed, although one still hears technical terms and foreign names mispronounced long after the correct version should have been firmly implanted.

We have not yet found a way of objectively measuring the effect of group work on attitudinal or higher cognitive learning outcomes, although it is becoming clear that learning in groups complements and builds on, but cannot replace, individual private study. Particularly in the early stages of the course, the impression exists that students have an incomplete conceptual grasp of the different academic disciplines contributing to medicine, but this is more probably a consequence of problem-based as opposed to the traditional discipline-based learning, and should not necessarily be laid at the door of the groups.

Other anecdotal evidence about curricular effectiveness is generally positive. Sometimes non-faculty members are appalled by the students' apparent ignorance of the basic sciences (anatomy, physiology, etc.), although they are usually impressed by the speed at which learning takes place once the 'need to know' has been established; on the other hand, though, we hear reports of students who have demonstrated considerable knowledge and understanding of topics which curriculum planners know have not been covered in the course. Such reports augur well for the future of our graduates as lifelong self-educators, and imply the student's highly motivated and actively participant role in guiding his or her own learning. Some students who have undertaken elective studies in centres of excellence in Australia and overseas have returned with very encouraging testimonials.

The other positive feature demonstrated by our students, noted anecdotally by a number of visitors to the faculty, is the students' ability to undertake informed discussion on ethical and professional matters, and their ability to deal relatively comfortably with sexuality, death and dying, and other sensitive areas. We regard this as a result of the explicit inclusion of such topics amongst the subjects for discussion in groups,

and the opportunities for discussion that such groups provide.

In the absence of data on effectiveness, discussion of *efficiency* is relatively meaningless. This educational undertaking is certainly costly in manpower, although much of the tutorial load is undertaken by local practitioners, most of whom work for a small honorarium and an academic title. So far, we have been able to find enough tutors, itself an indication that tutors find it a worthwhile experience.

An indirect measure of efficiency arises from the level of student attendance at groups, implying that generally they regard it as a useful way of spending their time, in comparison with alternative ways of learning open to them.

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5 KINESIOLOGY: ACADEMIC ASPECTS OF PHYSICAL EDUCATION

Peter Glew

The distinctive features in this chapter are the following. The syndicates had six members, self-selected, and they organized their own meetings. The consolidation phase took the form of an oral presentation by one of the three syndicates studying a particular topic, the students being encouraged to use a variety of audio-visual techniques and demonstrations to communicate their findings. Each syndicate report was assessed by the other syndicates; in addition students were set a multiple-choice paper at the end of the course, and answered a single prepared question under examination conditions. The author reports the initial difficulties of the students in handling the technique and the gradual intensification of involvement; he also makes a distinction between the learning that took place in this course and the learning he has observed in customary courses. There is a reference to the sense of insecurity felt by the tutor in this situation. (Editor)

THE ORGANIZATION OF THE COURSE

The course described here took place at Bede College, Durham, with second-year men students training to be teachers of physical education. Two of the courses on academic aspects of the subject were on human anatomy and kinesiology, the latter being a multi-disciplinary approach to the scientific analysis of movement involving mechanical, morphological and functional interpretations.

The climate of the institution was open and innovative, its communication and decision-making structure encouraging both staff and students to exchange and examine ideas. Strong student representation on all decision-making bodies had been working successfully for a considerable period of time and effectively encouraged open, positive and yet critical relationships between staff and students.

The approach to a small-group method of working evolved as a response to an existing situation. In the regular formal departmental meetings of staff and students, as well as in other formal and informal exchanges, the lecture method of teaching was strongly criticized: it was boring; it was too theoretical; it was irrelevant to student needs as potential teachers; and it contradicted the teaching principles that were expounded. I decided therefore to devise a course which would actively involve students in the teaching/learning process; would utilize the experience and knowledge already in the group; would conflate theory and practice; would encourage

the use of a variety of teaching/learning resources; and would initiate an awareness of group processes.

The first course was started in 1970 and comprised eleven one-and-a-half hour sessions, the initial session being used to introduce the mode of operation and set up six small groups (syndicates) comprising six students in each. The same weekly assignment was given to three groups whilst a different assignment was given to the other three groups. Thus two topics were studied each week. During the week a syndicate would meet in order to fulfill the task requirements and prepare a report. During the timetable period a syndicate would present its findings to the remainder of the class, two other syndicates having covered similar ground. This presentation was a teaching situation in which a variety of resources and methods were used — film loops, OHP transparencies, models, tape recordings, etc. On occasion, duplicated summaries were made available.

The formal report, usually lasting for 15—20 minutes was followed by a discussion in which other groups or individuals were free to contribute or question. The groups who had covered the same topics were able to provide supplementary material, provide a different emphasis or disagree on interpretation. Individuals were encouraged to use their specialized knowledge of activities. For example, the applications of leverage principles have different meanings and mechanisms for the understanding of a golf swing, a kick in soccer or a somersault by a gymnast.

Each report was assessed by criteria agreed by the class as a whole and then followed by a similar pattern for the second topic. Finally the work for the following week was set up.

During 1972, the main course in physical education was restructured to accommodate new developments in the field. As a result of these changes, the time available for the kinesiology course was very significantly reduced and the syndicate approach was reluctantly abandoned.

INPUT

Group assignments were prepared by the course tutor and were regarded as being of crucial importance. Anyone moving into a field of study unfamiliar to him is faced with at least two problems: what to select as the fundamental concepts upon which to build; and how far to develop particular topics — a 'boundary' problem. In addition, the disparate scientific background of students was problematic, particularly with those who had experienced a lack of success in scientific courses at school and had some sort of 'mental block'. Tasks were needed to actively involve participants in at least two ways: first to enable students to analyse activities with a view to the establishment of some coherent principles which could be checked at a theoretical level; secondly to understand and relate theoretical principles across a broad spectrum of activities.

Thus the early topics were designed to focus on very simple concepts which perhaps had been forgotten or misunderstood at an earlier stage.

For example, an early topic required the group to name and define planes and axes, formulate a generalization regarding their relationship, produce a simple teaching model and classify a series of activities of increasing complexity.

A 'spiral' model was utilized to develop more complex ideas. Thus, whilst Topic 4 was concerned with a basic understanding of gravital force in a general way, including the establishment of the position of their own centre of gravity, Topic 12 was an exploration of concepts concerning stability which finally asked students to formulate a set of 'Principles of Readiness' for various sporting activities as widely disparate as a sprint start or the readiness to receive a tennis serve. By the end of the course, syndicate tasks utilized most of the concepts developed earlier through the analysis of complete and complex patterns of movement. Thus the analysis of a discus throw would involve the breaking down of observed movement into a series of phases. Each phase could be then described and explained in anatomical terms or such concepts as leverage, force, etc. Obviously, part of the preparation was to ensure adequate access to resources and materials.

PROCESS

The Functioning of the Syndicates

These observations are taken from two sources: a two-hour 'feed back' session held after the end of the course and the weekly field notes kept by the tutor.

All groups reported an initial difficulty in working together. Not only were there problems in finding a mutually convenient time for six people to meet, but second-year students generally were required to 'live out' and tended to be spread over a wide geographical area. Whilst friends often lived close to each other, they also were likely to have common sporting interests. The spread of practical interests in one or two syndicates was thus restricted. Several groups reported that they had initially worked in pairs and had then come together as a group to develop their report. Indeed the most effective groups, as assessed by their peers, appear to have been those adopting this working pattern. All groups reported difficulty in concentrating on the task when meeting together and stressed the need to discipline themselves and learn to use the situation. Two groups were particularly critical of a tendency for some members to do more work than others. They also emphasized the time-consuming nature of the method of working and it was these members who expressed a preference for a conventional approach or individual assignments.

Strong support was widely expressed, however, on several grounds. The process of articulation in the syndicates clearly helped many students to learn. 'If you start talking about it, you soon find out if you really know about it and understand it,' or 'I thought I knew it until I started to talk about it — then you discover the weaknesses.' It was clear from the

student accounts that the interactive process was also helpful because of the questions asked of them. One student said that it was much easier to 'ask your friends daft questions — they knew you weren't stupid' whilst many reports indicated that there was a 'ripple effect' in that the discussions generated in syndicates became an ongoing process — during meals, in the bar or on coaches travelling to 'away' fixtures. The group concluded that far longer was spent over the work than happened on other conventional courses. On a number of occasions the course tutor was asked to give his views on issues generated by the course but debated informally.

My field notes indicate a gathering of momentum. Very early in the course my notes state 'Reporter was very tense, monotonous etc. Tendency to use Overhead Projector as a prepared blackboard with the remainder taking notes (verbatim). As a result, long pauses ... other groups contributed nothing'. This was followed by 'some savage criticism from Group 5 — "What use is it to rehash a book?" This led to a lively discussion which reviewed the mode of approach. The outcome was a series of suggestions from the group — "survey the field and select the key points. Relate this to specific and relevant examples. Decide on a suitable mode of presentation".'

As the 'spiral' unwound, the amount of student participation increased sharply. The room became a scene of activity — tables moved to allow a demonstration to take place, students trying to establish a point moving to the blackboard to illustrate their argument, discussions from previous sessions being resurrected during later sessions accompanied by new evidence or interpretations. It was at this point that I felt the course to be justified. There emerged an increasing insight into human movement and an awareness that the effective performance of physical activities needed to be based on sound mechanical principles and that an understanding of these principles would help to explain cause and effect. There was one particularly vivid example.

In discussing the techniques of long jumping, it was concluded that body rotation was problematic and inhibiting. Indeed the various styles of jumping were all methods of slowing down undesirable rotation. A student suggested that it would be more effective to use rotation positively and after some discussion, a style of jumping was postulated which used a forward somersault. Over the weekend, an illustrated article appeared in the *Sunday Times* making suggestions identical to those derived from first principles by the students. It was only at the next session that I became aware of the article, which several students had cut from their newspapers. This incident gave rise to a considerable amount of 'lateral' thinking.

A further unusual experience which seemed to indicate positive motivation occurred when the tutor, on arriving rather late, found the session in full swing.

As the discussions became longer, problems arose, since less time became available for the formal reporting sessions, tending to throw the total programme out of phase.

Group Reporting

This was described on the student handout as follows: 'This is one of the most important aspects of the method of working. In effect it is a teaching situation since half of the class will be unfamiliar with the material. Each group is required to produce a written report for reference purposes, but other modes may be used additionally in the group session, e.g. tape recordings, overhead projector transparencies with commentary etc.'

The modes of reporting varied considerably. Sometimes one or two members of a syndicate made the report, on other occasions each member developed some particular aspect of the task. The techniques of presentation were both varied and imaginative. For example, in the first working session one group recorded their report on tape in conjunction with a series of overhead projector transparencies. The report was divided into six sections, the breaks between the sections allowing for questions, discussion and amplification. The report from group two was delivered directly by two students using the overhead projector and a model, followed by a third using film loops on the spectro-analyser (a specialized film projector with a device for projecting one frame at a time as well as slow motion enabling more accurate movement analyses to be made). The role of the latter was to provide a conflation of the theory and the practice. Frequently the reporting group provided a duplicated summary of their report. One later group made a recording on videotape.

PRODUCT

Assessment

After each reporting session, syndicates discussed and assessed the report on criteria set up during the introductory session. Indeed, similar exercises had been used on other courses, particularly those practically based. There was thus some familiarity with problems of assessment, but, more importantly, an atmosphere of trust between students was in evidence. The criteria used by the class were those of selection and presentation in terms of perceived learning effectiveness. Each group gave a consolidated grade on a five point literal scale; the spokesman briefly indicating the reasons put forward in support of their judgement.

End of course assessment was based by agreement on three components: the above consolidated grades; an objective style test prepared by the tutor from questions set by each syndicate; and the answering of a single prepared question under examination conditions. (Students were also required to pass a formal Area Training Organization examination which included a kinesiology question, though the paper as a whole offered considerable choice.)

Overall Evaluation

By the end of the course several things had become apparent.

- 1 Less material had been covered using the syndicate approach than by using more conventional teaching methods.
- 2 A different kind of learning seemed to have taken place. The objective test indicated a satisfactory grasp of the basic concepts and the prepared question demonstrated individual ability to write a coherent answer under examination conditions. What appeared to be most significant was the in-depth, 'meaningful' learning which had taken place. The knowledge gained was related to the previous experience of the individual and a great deal had been recorded on their 'cognitive maps' as evidenced by the ability of students to discuss the work and apply ideas to new situations. For example, not only could Newton's Laws be quoted, but their implications in regard of human movement was understood, could be applied to a broad variety of physical activities and were related to teaching and coaching young people — the 'why' as well as the 'how'.
- 3 The syndicate method generated a high degree of student involvement. More careful consideration needed to be given to the structure (and size) of the syndicates. A smaller number, say four members, might increase individual involvement without losing the pool of talent and experience in the group. Experience indicated the need to provide more opportunities for discussing the inter-personal aspects of the syndicate, possibly feeding in some background of group dynamics. It was clear that students had to learn to use syndicates. Thus a more flexible programme was needed.
- 4 The mode of operation had 'spin off' effects. The 'reporting' situation exposed students to a variety of audio-visual aids and teaching techniques associated with them. In assessing the reports, students focused partly on a critical appraisal of teaching techniques. Many students later claimed that the experience had been of considerable advantage on teaching practice, helping them toward the realization that 'telling isn't teaching' and that the acts of 'teaching' and 'learning' are not of necessity related.
- 5 The method initially generated a high degree of insecurity in the tutor, since the pattern of interaction and control was considerably altered by 'giving away' some of his 'authority'.

The result of this experience seems to indicate that a small group approach can produce satisfactory end states of knowledge in a scientific field, whilst the process seems capable of generating excitement, enthusiasm and involvement in the learning process.

6 A REPORT FROM AMERICA

Leslie Beach

This chapter represents a systematic attempt to measure cognitive and affective outcomes from a use of the syndicate technique. Syndicates were recruited on a random basis and organized their own meetings. Voluntary plenary sessions were held and the tutor was available for consultation. An example of an assignment is given. Students were assessed by means of a multiple-choice examination, a term paper or special project, an evaluation by the other members of their own syndicate, and a self-evaluation, guidelines being provided for the two latter. Observations of each syndicate were made through a one-way window, yielding quantitative data. Students enrolled in the classes preceding and following the experimental course were regarded as constituting a control group. Standardized tests of various aspects of group process are reported, indicating a close correlation between strong interaction within a syndicate and, first, job satisfaction; second, increase in interest in the subject; and, third, improved grasp of applications and of the wider implications of the academic work. Other American work is also referred to, indicating widened student reading and increased enthusiasm in syndicate-based courses. It is noted that the less able students often showed great gains from the work. (Editor)

THE ORGANIZATION OF THE COURSE

The principle experience here reported was of an experimental course in social psychology carried out in 1966-67 with the aid of a grant from the US Department of Health, Education and Welfare. This was the culmination of a number of years of small-scale experiment by myself and other American investigators, and it has been followed by other experiments which are reported more briefly.

Fifty-four students were enrolled in the course, which was held at Hope College, Holland, Michigan, a private liberal arts college of 2,000 students; the course lasted for one semester in the second (sophomore) year of the four-year undergraduate course. Another forty-one students who enrolled in the two semesters preceding and following the experimental course comprised a control group.

At the beginning of the experimental course the students met for several introductory sessions. They were issued with an instruction sheet and a short 'manual for self-directed study groups', and after discussion and pre-testing were divided on a random basis into nine groups of six students. It was explained that the main purpose of the scheme was that they should assume

the major responsibility for their own learning and should be effective members of their own groups. Groups met weekly in their own time and organized their work in whatever way suited them best. Approximately every two weeks a voluntary meeting of the entire class was scheduled with myself; I also held 'open house' once a week for informal consultation and was available for private sessions by appointment. The small self-directed groups or syndicates were in addition required to fill out a 'Small-Group Meeting Report' after each of their own sessions, and each individual had to produce a written paper or carry out a special project before the end of the semester.

The final grade was based on four factors. Forty-five per cent of the marks were determined by performance on the final comprehensive examination, which consisted of 100 multiple-choice items covering the prescribed syllabus and texts and already subjected to an item analysis in previous courses. The same questions constituted the post-test for academic achievement. Fifteen per cent of the grade was earned on the term paper or special project, 20 per cent was derived from an evaluation of each individual by the other members of his syndicate, and 20 per cent from a self-evaluation by each individual, a set of guidelines being offered to assist in the latter two assessments.

Further information was obtained on individual students and their response to the course by means of two questionnaires, administered respectively at the beginning and end of the course, and by the use of the Watson-Glaser Critical Thinking Appraisal¹ form.

Evidence on the functioning of the syndicates was obtained by scheduling about a third of the syndicate sessions in an observation room equipped with a one-way window. The reasons for this were fully explained and apparently readily accepted. Observations were made by myself and by two student assistants, the latter using the Bales Interaction Process Analysis (BIPA)² technique and the Bales Recorder.

INPUT

The syllabus specified the objectives of the course: a knowledge of concepts, principles and methods of social psychology (examples given); an appreciation of the nature of the interaction between the individual and his social environment and of its role in group behaviour; and skill in

¹ This test has five parts designed to test the ability to recognize assumptions, to make inferences, to deduce consequences, to interpret statements, and to evaluate arguments.

² BIPA is a system of categories designed for the analysis of interactions within groups of people. The 12 categories are arranged in three sets: the positive social-emotional area ('shows solidarity', 'agrees'), the task area ('gives opinion' or 'orientation', 'asks for opinion' or 'orientation'), and negative social-emotional area ('disagrees', 'shows antagonism'). (Editor)

interpersonal and group relations. By way of example, the third assignment, following Krech, Crutchfield and Ballachey's *Individual in Society*, read as follows:

Social attitudes

A. The nature and measurement of attitudes

- | | |
|-----------------------|---|
| Required reading | TEXT, ch. 5: "The nature and measurement of attitudes" |
| Supplementary reading | Newcomb, Turner and Converse, SOCIAL PSYCHOLOGY ch. 3: "The nature of attitudes" and Appendix A: "The measurement of attitudes" |

B. The formation of attitudes

- | | |
|-----------------------|---|
| Required reading | TEXT, ch. 6: "The formation of attitudes" |
| Supplementary reading | Newcomb, Turner and Converse, SOCIAL PSYCHOLOGY pp. 40—45: "attitudes"; Maccoby, Newcomb and Hartley, READINGS IN SOCIAL PSYCHOLOGY ch. 13: "Inter-group tension, prejudice"; article by Frenkel-Brunswik, Levinson and Sanford: "The anti-demoncratic personality" |

C. The changing of attitudes

- | | |
|-----------------------|---|
| Required reading | TEXT, ch. 7: "The changing of attitudes" |
| Supplementary reading | Newcomb, Turner and Converse, SOCIAL PSYCHOLOGY, ch. 4: "Attitude change" Maccoby, Newcomb and Hartley, ch. 13: "Inter-group Tension, Prejudice"; article by Deutsch and Collins "The effect of public policy in housing projects upon interracial attitudes" |

PROCESS

The Bales Recorder yielded 5 — 7 records of interaction within each syndicate over the semester, giving representative figures on the number of contributions made by each individual and the variety of his comments. The average number of participations per person was thirty-eight and of different types of contribution five, and these figures appear to indicate intensive and well distributed interaction within the small groups.

However, there was considerable variation between the syndicates in these respects, and a rather high degree of consistency in any one group over the semester as a whole. What was particularly noteworthy was that where interaction was relatively low in quantity and variety, the members' attitudes to the group work were less positive ($x^2 = 5.35$; $p < 0.08$), and

where interaction was high in quantity, an especially high percentage of participants were highly positive in their reactions to the group work ($\chi^2 = 5.90$; $p < 0.06$).

One of the objects of the investigation was to identify the conditions which enhanced or inhibited learning in the syndicate setting. Among the inhibiting factors were: over-eagerness to speak, resulting in inadequate attention to others; impatience with colleagues' lack of understanding; inadequate dedication to the task in hand, with consequent superficiality of learning. Among enhancing factors were: appropriate tying of learned concepts to members' first-hand experience; individuals being willing to admit to lack of understanding; members helping one another to understand what third parties were trying to say.

It was noticeable that the 'good' groups were not necessarily those with a high Grade Point Average (GPA: the average of grades awarded for previous courses). But they tended to show high scores not only on frequency and variety of contribution and on attitude to syndicate work but on the quality of their work, on the range of reading outside the prescribed text, on their gains in critical thinking and academic knowledge, and on their grasp of the outside implications of their material.

A closely related finding concerns the student whose previous academic record was weak — the student with a low GPA. Those with low GPAs reported better study both in quality ($\chi^2 = 5.52$; $p < 0.03$) and in quantity ($\chi^2 = 5.86$; $p < 0.06$) than would be expected by chance. They also reported consulting more books in preparing their papers ($\chi^2 = 5.14$; $p < 0.09$) and a greater increase in their interest in social psychology ($\chi^2 = 7.21$; $p < 0.03$) than would be expected. There is significant evidence here that it is not only the 'gifted' or the 'able' who can make full and effective use of the syndicate technique.

PRODUCT

Table 6.1 gives the pre-test and post-test scores of the experimental and control groups:

	Pre-test		Post-test		Achievement gain	
	mean	s.d.	mean	s.d.	mean	s.d.
Experimental group N = 54	41.4	6.9	60.6	9.8	19.2	10.1
Control group N = 41	41.8	4.9	66.5	8.9	24.7	8.8

Table 6.1 Means and standard deviations on course achievement scores

The gains in knowledge are significantly in favour of the control group: a result which accords with the conventional wisdom but not with the 'no significant difference' results obtained in the majority of investigations and by myself in earlier and later studies. It is possible that the explanation in this case is that in view of the formality of the experimental investigation I tied my lecture and discussion material more tightly than usual to the prescribed texts.

The Watson-Glaser Critical Thinking Appraisal test showed some significant improvement between pre-test and post-test: correlated $t = 2.077$; $p < 0.05$. This test was not given to the control group.

As regards the students' attitudes to the syndicate approach, about half the experimental group expressed a preference for this approach, and these were compared to the slightly smaller number who expressed a preference for the customary lecture/discussion approach. The former rated much higher in the satisfaction derived from the course ($\chi^2 = 19.107$; $p < 0.001$); showed much greater increase in their interest in social psychology ($\chi^2 = 11.358$; $p < 0.001$); and rated higher their grasp of applications and implications ($t = 1.935$; $p < 0.07$). It appears that when the syndicate technique works well it has a powerful influence on the students who take part; but when the technique does not work well students prefer the customary pattern. A very important question is raised here.

REPORTS FROM OTHER AMERICAN SOURCES

In an earlier study, similar results were reported by Hovey et al. (1963). In an educational psychology class at the University of Colorado these investigators matched a self-directed study group with a lecture group, the former being then broken into small groups of five or six students who met in the small groups two days a week and with the instructor one day a week. The meeting with the instructor was concerned with problems in group functioning and questions on course content. In this study the two classes showed no significant difference in achievement in the final examination or in a retention test administered ten months later. But the self-directed study group did a significantly greater amount of 'serious' reading and showed small but persistent superiority in indices of curiosity. The latter, the authors considered, might well be the basis of a self-sustaining process, and of a continuing search for knowledge, after the formal studies are over.

Webb and Grib reported similar experiments from St Norbert College (1967). In these cases, as in several of the British courses reported in this volume, the syndicates were provided with questions prepared by the professor to serve as guides to student-led discussions of course content. The report indicates that the students felt a more free and relaxed atmosphere for discussion, making them less inhibited in asking questions and challenging the statements of colleagues, and that they also found the course material became a lot clearer when translated into the words of fellow students and illustrated by personal experience. The instructors

of the courses reported increased student involvement, interest and enthusiasm.

AUTHOR'S SUBSEQUENT EXPERIENCE

The BIPA system, being designed for problem-solving or decision-making types of discussion, proved somewhat unsatisfactory in the major project reported above, and in later experiments a revised form of BIPA was used. In addition, the sessions held in the observation room were recorded on videotape.

In one of these later studies students were divided into parallel experimental and control groups. The experimental group was as before divided into syndicates; and the control group met in conventional lecture/discussion classroom manner three times weekly. Periodic written assignments were required of both classes, and both took pre-course and post-course tests of achievement. There was no significant difference in achievement between the two groups but, as is shown in Table 6.2, the experimental group out-performed the control group on several other dimensions:

	Experimental group mean	Control group mean	t
Quantity of study in the course compared to similar courses (9-point scale)	5.72	4.69	1.645
Quality of study in the course compared to similar courses (9-point scale)	5.46	4.65	1.333
'Required' readings completed	76.25	58.40	2.208*
'Non-required' readings completed	5.26	1.56	3.167**
Books consulted in writing papers for course	14.08	10.08	2.050*
Other books in journals consulted in connection with the course	3.59	2.16	.935

* $p < 0.05$ (two-tailed) ** $p < 0.01$ (two-tailed) (Beach 1974)

Table 6.2 Comparison of student ratings on outcomes other than course achievement

It seems to be clearly demonstrated in the experience here reported that the *potential* of the syndicate technique is very great. This is so both for the student and for the administrator, which latter can see that the cost

of adequately supervising such self-directed learning activities is lower than for the usual classroom instruction. What is also clear is that in syndicate based courses more needs to be known about the causes of difficulty some students experience and for this purpose I have recently been experimenting with preliminary training sessions in which I have aimed: to help syndicate members to get to know one another better; to assist the syndicates to build up a sense of group identity and group cohesiveness; to encourage them to cultivate a habit of honest and direct interpersonal communication; and to develop group-process skills which would increase the effectiveness of the syndicate sessions. Students have reported very favourably and this may be one way forward.

7 EXPERIMENTS IN THE EXPLORATION OF VALUES

Gerald Collier

The distinctive features in the work reported in this chapter are the wide range of student intakes involved; the restriction of membership to five students, self-selected, in each syndicate; and the focus on an area of study which seldom receives explicit treatment in higher education. The purpose here was not for students to study an area of subject matter but to explore the values operating in individuals and groups in the specific situations offered by feature films and by literature, and develop their own insights into ethical issues.

This chapter reports a series of experimental courses conducted with classes at Temple University, Philadelphia, and Bede College, Durham, during the period 1968-70. The class at Temple I will for convenience refer to as class A; a first-year class of student teachers at Bede in 1969 as class B; and a third-year class at Bede in 1970 as class C. The course was also offered on further occasions at Bede in collaboration with Mr Alan Suggate, who in addition contributed to the videotape referred to in Chapter 9.

INPUT

The course in each case opened with the showing of a film, *Twelve Angry Men*, a study of a jury at a murder trial. The jury's tentative verdict is 'guilty': a single member pleads for some discussion of the evidence and begins to sow doubts which eventually lead to a reversal of this verdict. The film is a study of an individual of more than usual integrity who is able to maintain his uneasy doubts in the face of opposition and indifference; this character, Davis, is played by Henry Fonda.

At the close of the film the class was divided into syndicates of five persons. In principle they chose one another on the basis of previous acquaintance but in practice there had been little previous mutual knowledge among the members of classes A and B. The syndicates were then issued with assignments, consisting of several questions on the mode of influence of the Henry Fonda character and a final question asking for a definition of 'integrity' on the basis of this film. Each syndicate was required to hand in a report on the questions posed. The lecturer assembled these reports in a formal lecture of 20-30 minutes, accompanied by a duplicated summary, and a plenary discussion was held.

In the second and third assignments a further study of the concept of integrity was undertaken through an examination of Bernard Shaw's *Saint*

Joan, Plato's Socrates (in the *Crito*). T.S. Eliot's Thomas a'Becket (in *Murder in the Cathedral*) and Tolstoy's Ivan Ilytch. In the earliest version of these assignments the above characters were all included in a single exercise, together with Antigone from the play by Sophocles, it being assumed that the members of the class would be familiar with the majority of the figures. With classes B and C, whose members were known to be younger and less widely read, the characters were divided between two assignments, each given to three syndicates. In each of these assignments, which extended the range of situations in which integrity was being expressed, one question asked for a re-definition of the concept to cover the full range of situations studied. The practice in most cases was for a syndicate to distribute the reading among its members, to debate the questions set, and to arrange for their views — whether agreed or conflicting — to be written up.

The first three assignments present a number of 'heroic' figures with, in addition, one less admirable character, Ivan Ilytch, who may however be considered to reveal a 'heroic' revulsion against his previous life. The next phase of the work was to show a film, *Saturday Night and Sunday Morning*, in which the leading character, Arthur Seaton, is an anti-hero. One question in assignment 4 read 'It may be said that in some ways Arthur Seaton resembles many unskilled manual workers: he is resistant or irreverent towards authority, unpuritanical towards sex, rather willing to resort to blows. What evidence do you find of other qualities, such as (a) a willingness to stand up for his own freedom of decision; (b) a recognition of the restricted outlook and experience of his parents; (c) an understanding of his own defects; and (d) acceptance of a need for eventual conformity to certain social patterns?' (The question was not of course intended to imply that unskilled manual workers have a monopoly of such characteristics, only that sociological studies show some differentiation between social classes in the directions indicated.)

Assignment 5 moved to a fresh field. The students were asked to study three chapters of Carl Rogers' *On Becoming a Person* (1961) and set out the features of what Rogers calls 'a fully functioning person'. Subsequent questions required them to apply these criteria to the six characters so far studied.

Following assignment 5, a third film was shown, *Harp of Burma*, a Japanese film directed by Ichikawa, about a young Japanese soldier in Burma in 1945, who was drawn to becoming a Buddhist monk and burying the remains of dead soldiers, as a kind of atonement for the evils of war.

In assignment 6 the questions focused on the evidence assembled by C.S. Lewis in *The Abolition of Man* (1943) for the existence of a corpus of moral principles (the Tao) widely spread, both historically and geographically, among mankind, and required the student to make cross-comparisons with Carl Rogers' criteria for a fully functioning person. They also required the student to examine the nature of the authority that sanctioned such

codes, and to ask themselves how far these were felt to be imposed by a divine agency, by a tradition transmitted by older people or by the individual conscience, and how far to be accepted by civilized persons as a natural part of civilized life.

In the American course assignment 6 was replaced by three assignments giving a more extended treatment of the psychological basis of moral development.

PROCESS/PRODUCT

The exercise does not lend itself to a simple exposition in terms of input, process and product. The product consists of certain ways of thinking about moral action, certain ways of looking at moral values, which are themselves the process that is initiated and developed in the course of the work.

The first three assignments had several objects. The first was to study a group of figures of exceptional integrity and attempt to get inside their minds, to observe the pressures of work on them, to follow the interaction between them and their associates, and to understand the nature of their influence on other people. The second object was to provide the opportunity for the students to argue out the validity or otherwise of the judgements and decisions made by the characters studied, testing their own judgement in specific and complex situations against that of the figures studied and against that of their fellows in the syndicate and the class. The moral judgements of young people are often based on black-and-white principles, on an over-simple interpretation of complex situations, and the present exercise can develop a richer appreciation of balancing factors and claims. The third object was to define the moral quality of integrity — one of the virtues most consistently advocated and held up as an ideal by the great figures of the western tradition — in order to see more clearly what this quality is and what it is not; thus giving the students some experience of the conceptual clarification needed in any fully developed moral thinking. And fourthly there was the object of clarifying the nature of the arguments involved in reaching the moral judgements studied — the kind of evidence selected and inferences drawn, the assimilation of concrete situations to different value-principles, the decision on the relevance of particular principles or the priorities among them.

In the first and second of these processes the student is acquainting himself with characters of an order he rarely meets in the flesh, in some degree sharing in their motives, their conflicts and their decisions, in a concrete, operational sense. This is an element that receives inadequate attention in many discussions on moral education.

The full significance of important ethical concepts may well be lost on students unless given vivid embodiment in convincing figures of above-average stature. Whitehead (1929) expressed a profound truth when he said, 'There is no moral education apart from the habitual vision of greatness.'

In the third and fourth processes the student is attempting to

conceptualize qualities in which he has vicariously shared, to draw and re-draw their defining boundaries. (Some of the source material drew on existentialist thinking — Marcel, Sartre — since this has been preoccupied with the exploration of 'good faith'.)

The four processes involve an analysis both of psychological and of moral questions. Students have to ask themselves questions about motives and interaction on the one hand, and, on the other, about the moral quality, the basis of justification, of the actions of the six characters. Each process of study involves both types of analysis.

The film *Saturday Night and Sunday Morning* was introduced for two reasons. In the first place it was felt that a discussion of heroic characters can rather easily become air-borne, and that this film would bring students down to earth (if they needed it). Secondly, it is necessary at some stage to define where integrity, associated with self-deception, passes over into disregard for other people, and in Arthur Seaton's character the former is a good deal less conspicuous than the latter. Many students in fact were unable to detect the former; but the following extract from an American syndicate's report illustrates the balance of comment as it emerged after the setting out of Carl Rogers' analysis of the characteristics of a fully functioning person in assignment 5 (Rogers 1961).

'On the surface Arthur [Seaton] seemed to demonstrate the qualities of a man who is "all too human" or even "animal". He was pleasure-seeking, irresponsible, disrespectful and a blatant liar. He was unconcerned about others and showed a definite lack of morality. ... He lacked stable relationships in his association and even used others. He was a devil-may-care ruffian who wanted only to enjoy himself. At the same time he demonstrated some of the characteristics of the fully integrated personality delineated [above]. Arthur Seaton was independent and non-conforming. He was not going to be "ground" into a pattern. He did not try to play a role just to please others. He demonstrated self-awareness and self-acceptance. His attitude was self-confidence. "I'm me and nobody else." He believed in what he was doing and knew what he did not want to become.'

In assignment 5 the psychological elements of the studies of assignments 1 — 4 are extended in a more generalized form. Here the students are asked to note the personal qualities a psychotherapist observes emerging in patients as they become more balanced, or able to cope, and to examine in what respects the six characters studied share the qualities set out by Rogers.

In the sixth assignment the task is to make a comparative study of the personal qualities formulated by Carl Rogers with those to which the moral codes of a number of human civilizations appear to point, as presented by C.S. Lewis (1943).

The purpose of introducing the Japanese film at this stage was in part

to prevent the exercise being too neatly tied up in rational terms; the obstinate problems of evil and suffering cannot be left out of the debate. In fact the film's approach to these problems served to give the summary statements of Rogers' principles and C.S. Lewis's Tao a significance beyond the common-sense everyday meanings; and indeed to set the problems of moral principle more firmly in a world context.

The feature films were used for several reasons. As with television, a story told by a film has an immediacy of impact not shared by purely literary media, since it is conveyed by an amalgam of verbal and non-verbal modes of communication similar to those of everyday experience. The images of personalities and relationships cohere and come across through a richer and more complex texture of words, gestures, tones of voice and facial expressions than in a novel or printed play. Thus, if appropriately chosen, a film creates an emotional engagement in the students which can serve as a 'carrier' both for the literary texts which follow and for the subsequent analyses and discriminations. This is particularly important for those students whose verbal sensitiveness is not great and for whom the literary classics tend to be opaque. Thus students who have chosen specialist studies other than literature are put in a position of deep involvement in the human situations and problems that are explored in good literature, and this is shared by the other members of the class.

Finally a comment on the method of organization of the students' working situation. The central core of the course was the work done within the syndicates, and the essence of this was the arguing out among the members of each syndicate of views they wished to report in answer to the questions posed in the assignments. The material of the discussions held within the syndicates came either from the films seen or from the texts read; the latter being selected passages indicated in the assignments and distributed among the members of each syndicate. When the tutor summarized the syndicate reports in his lecture he revealed as much of his own views as appeared relevant.

This type of organization has an important bearing on several aspects of moral education. In the first place the students are in general unable to learn the tutor's views on the questions raised until after their own views have been formulated. They are therefore less likely to be influenced either towards or against conformity with his views. It is true that in the American course there was a final examination and this introduced an element of absolute judgement on the part of the tutor. But this is not inherent in the use of syndicate methods, as I have noted elsewhere (Collier 1969). It is true too that a tutor may at times wish to contribute his personal views to a syndicate's discussion. But even so, his contribution will be fragmentary and likely to be lost to sight when he moves on. In short, this pattern of organization makes it easier for a genuine dialogue to arise between the tutor and the students.

Secondly, the lack of mutual understanding and confidence between the

generations can easily, in normal seminar contexts, be masked by habits of politeness and the pressures of examinations, whereas the syndicates are able to formulate their views before the tutor selects them for his lecture-summary. It is true that the tutor may still misread the evidence of the reports; nevertheless the evidence of students' thinking is likely to be available in more decisive form than in a seminar discussions. The structure gives the opportunity for the students to move the debate in fresh directions, to explore new approaches to value questions.

It may be argued that the tutor *ought* to be influencing the students' moral judgement, since he is (or should be) wiser and more sophisticated in his views. I suggest that his most appropriate mode of influence is through the provision of assignments felt by students to be relevant to their interests and experience, the bringing of significant texts to their attention in a setting which enables them to make effective use of them, the pressing of certain questions of the kind already outlined, the creation of a climate of genuine inquiry in ethical questions, and the treatment of their views in a way which demonstrates that he respects and values them.

Thirdly, in moral questions especially, the personal factors loom large and students who have decided the membership of their own syndicates are likely to be better able to tolerate the inevitable divergences of response and orientation which have to be worked through. Such divergences arise from differences in social class background and in ideology as well as in temperament and outlook, and an important part of a student's moral education lies in learning to accept and appreciate the unexpected depth or shallowness of his own responses as well as the richness and the diverse contributions of other people's. Each syndicate tends to develop its own culture, in which mutual understanding and insight are important factors, and individuals are caught up in a more intimate and detailed searching into one another's outlook.

Fourthly, the intense and protracted debates *under the above conditions* appear to help students to clarify their judgement and improve their analytical skill. One can observe them developing their powers of deliberation and exploration in dealing with complex issues and strengthening their capacity for joint thinking and judgement. They learn a good deal about themselves, making explicit their own inner, un verbalized responses and discovering in some degree where their own deeper priorities lie. On the cognitive side they learn above all to interrelate more effectively the abstractions of academic sources with the particularities of personal experience and response. In these particular courses the least successful part, perhaps, has been the training in the analysis of moral argument and inference: the questions in the assignments have evidently offered insufficient scope in this direction.

Finally, it may be useful to place this work in the perspective established by certain American authors (Morrill 1980; Parr 1980). They distinguish three stages in the exploration of ethical issues. The first is the *clarification*

of the student's own values: the process by which he uncovers and makes explicit the values he finds strongly operative in his own make-up, and recognizes the priorities that actually exist among them. The second is the *analysis* of values, the disentangling of the values that operate as driving forces in the participants in any human situation, whether in everyday life or in the events of (say) history or literature. Third, there is the *criticism* of values, the process of exploring the validity of particular values and particular moral choices, with a view, not to arriving at, let alone prescribing, specific answers, but to exploring more fully the ethical dimensions of any given situations (Morrill *ibid.*).

Dennis Moss

This chapter reports, not a course following a published syllabus, but a project occupying the final month of an academic year, designed to develop problem-solving skills. The 100 students in the year-group were divided into four independent groups of twenty-five students. Each group was instructed to organize its work on the problem set, in the following stages: the group held a brain-storming session to identify possible component issues into which the problem could be sub-divided; self-selected sub-groups of 3 — 5 students (the syndicates) took up these various component issues; each individual selected one aspect to study in depth; the syndicates assembled this material into proposals; and the groups of twenty-five assembled the syndicates' material into coherent policies. Student leaders of two types emerged: 'academic' leaders concerned to organize the information and ideas generated; and 'managerial' leaders concerned with the overall organization of the sessions. Each group of twenty-five students had four tutors attached to it to act as consultants and resource persons; in one group the tutors in fact took a managerial role, with distinctive results. In general the students showed an unusually strong commitment to their preparation for meetings. In a final plenary session of two hours the four groups briefly reported their findings and a vigorous debate followed. (Editor)

THE ORGANIZATION OF THE COURSE

The foundation year students of modern Asian studies at Griffith University, Queensland, spent almost two semesters following an inter-disciplinary course of lectures and tutorials based on economics, sociology and politics together with studies in Asian languages. With four weeks of the second semester remaining the students were presented with the following problem:

It has been said that 'Australia's strategic, political and economic future lies with Asia and that Australia should reorient its policies accordingly'. Present arguments for and against this proposition and devise a coherent set of policies appropriate to your point of view.

Students were divided into four independent groups of twenty-five and told that it was the group which must tackle the problem and produce a set of coherent policies to present to a plenary session of all students at the end of four weeks. Each group consisted of a mixture of school-leavers and

mature students. In the meanwhile, six timetabled one-hour sessions were set aside for group meetings in large seminar rooms. The decision to organize the experiment in large groups was determined by availability of rooms and by the literature which suggests that less able students benefit from group problem-solving situations (Mahan 1970) and that groups have some influence in modifying the risk-taking aspects of individual decision-making (Wallach et al. 1962). In addition it was felt that the organization of groups might lend itself to creative exercises such as buzz groups and brain-storming as advocated by Stein (1975) and that the students might gain valuable experience from taking an active part in a small-group situation (Shaw 1976).

Largely because of the innovative nature of the exercise, and uncertainty as to how it might develop, four tutors were assigned to each group of twenty-five students. In a preliminary meeting the staff had agreed that as far as was possible the exercise should be student-centred but four tutors were assigned in the expectation that they would be able to handle any eventuality within the groups.

A working model for the exercise had been devised to reflect the logical stages of a group problem-solving process as defined by Gagne (1970), Gorman (1974) and others. The model can be summarized as follows:

Stage I

After examining the given problem the whole group utilizes buzz group and brain-storming techniques to identify how the overall problem might be sub-divided into component issues. The whole group then evaluates the range of component issues that were generated and groups them into a small number (3 — 5) of related ideas. Small groups of students are then assigned to further examine their related ideas (ie the problem is defined, analysed and redefined).

Stage II

Small groups repeat stage I activities until each member of the group has identified a relevant but specific topic for research.

Stage III

Research on individual topics is interspersed with cross-referencing of ideas in small groups. Each individual produces a series of policy recommendations related to his or her specific problem. (The research in this case was based initially on a large file of reference material identified by the teaching staff and held on a restricted loan basis by the university library, but see 'Input' below.)

Stage IV

Sub-groups evaluate and co-ordinate the ideas of individual members into specific, interrelated policy statements for presentation to the large group (ie sub-solution is synthesized following sub-group evaluation).

Stage V

The sub-group proposals are evaluated and synthesized into an

overall proposal for report to the plenary session. At this stage the evaluations of the sub-group proposals are very important since the simple 'addition' of proposals may not lead to a coherent policy and the consequences of the proposals must be determined (ie a *Coherent* solution is synthesized and evaluated).

Thus there were three functional stages, the large group of twenty-five students, small groups of three to five students and individual researchers. In practice, the bulk of the work and discussion took place in the small-group situation.

INPUT

It is perhaps just as important to stress the absence of specific inputs as it is to highlight the inputs themselves. The students who took part in the exercise had received no formal training in the techniques and skills which they would require at each stage of the group exercise. The need for such initial studies is referred to later.

However, at the outset the students received two 'scene-setting' lectures on the recent history and current state of Australian-Asian relationships from the Director of CSAAR (The Centre for the Study of Australian-Asian Relations) at Griffith University. In addition each student was supplied with a copy of 'Backgrounder' for September 1979. This publication of the Australian Department of Foreign Affairs (1979) contained a summary of a major government-commissioned report on Australia and the Third World (Harries 1979). In addition, each student received an extensive specialist reading list, all the items of which were 'frozen' in the university library for the duration of the exercise. This meant that they could be studied in the library (which was centrally located on the campus) but could not be removed from the library building.

During the first large group session the tutors briefed the students on the nature of the problem and organized buzz groups charged with identifying researchable components of the problem. In one of the four large groups a tutor assumed the role of chairperson, and, in recording student ideas generated by the buzz groups, he subtly edited the ideas, often changing their point and emphasis. Challenged later, by myself, the tutor confessed that he had been totally unaware of his 'editorial' role.

The other three large groups elected their own student chairperson and the subsequent small groups which formed from these large groups always operated on a 'tutor-free' basis. In the fourth group the tutors retained control throughout. In the small groups formed from this large group a tutor was usually present and, almost predictably, most exchanges took place via the tutor who assumed the role of small-group leader. Significantly, in the tutor-free small groups, 'natural' leaders emerged during the exercise who were concerned not with directing the other students as much as with organizing the information and ideas generated by the group. Towards the

end of the four-week discussion period these natural leaders often presented unwritten agenda to their groups based on previous progress and discussions. However, a new role emerged for a few of the tutors: that of discussing and advising the chairperson on the overall management and timetabling of the problem-solving exercise. In this way, the exercise had clearly revealed the evolution of two types of leader, the academic leader of the small groups and the (elected) managerial leader of the large groups. The latter seemed to welcome tutor advice on organization but the former never solicited tutor advice and tended to politely reject unsolicited offers of help. This seemed to reflect the findings of Carter (1968) that groups will tend to develop both academic and managerial leaders, each exhibiting different qualities. However, of greater interest were the demands made on the tutors in this context. Instead of being called upon for academic advice, the tutors found themselves answering queries on organizational skill. At times the impression gained was that the tutors were considering such problems for the first time and certainly this suggests an additional component is needed in academic staff development programmes.

PROCESS

The small groups in this experiment were self-selecting in that they were free to select which aspect of the overall problem (eg defence, overseas aid, economic relationships and trade, etc.) they were interested in. In most of the small groups this resulted in a free interchange of ideas within the group, with all members participating. This was, however, not the case in the small groups which operated under tutor control.

In some cases small groups were formed by individual students who were identified by tutors as normally being in the background of a large discussion in tutorial groups — the 'silent majority' of many classes. It was particularly obvious that after a rather shy and hesitant beginning these groups were just as productive and effective as others which had begun with more vociferous participants. Also, this emergence continued into the final plenary session when such individuals appeared quite happy to contribute to the discussion and defend their ideas. What was noticeable was that such groups flatly rejected the occasional polite offer of help from tutors, many of whom ended up by returning to their offices and doing other work. The one problem that emerged in two small groups was that of the self-opinionated, outspoken student who often formed his opinion on unresearched suppositions. Neither of the small groups concerned managed to cope with this phenomenon but the rather wild ideas generated as a result were very quickly vetoed by the reassembled large group.

What was also interesting was the commitment to research and private study demanded by the small groups. In the early meetings, individual students who had not completed their private study (which they had agreed to do at the previous meeting) were criticized, albeit in a friendly way, by their student colleagues. It was noticeable that the vast majority of such

students turned up at the next meeting with a well-researched report. It seemed that their commitment to work for a peer group was greater than it might have been for a tutor-led group. This contrast may have been because in the tutorial periods earlier in the course only two students in a group of eight to ten had responsibility for presenting material to the group (and therefore researching it), whereas in the small-group syndicates every student was responsible for some research.

It has been suggested (Collier 1980) that students in group discussion translate material from the source language to the language of the peer group. Detailed observation of the tutorial groups suggested that the situation was not as simple as this. In the early discussions when individual students could be said to be 'feeling their way' then often the language of the peer group predominated, very often coloured by the values of the peer group. For example, references to the ANZUS defence agreement between Australia, New Zealand and the USA were often made in scornful, left-wing tones at this stage. However, later in the process, when the groups were actively involved in formulating policy (which they would have to present and justify to a larger group) the language became much more formal and objective.

PRODUCT

A plenary session was scheduled as the climax of the exercise. Ninety-four students attended and almost all of the tutors, the latter acting only as observers. The major proposals of each group were presented and discussed briefly in fifteen-minute segments and then an open debate was staged. The student participation was extremely good, with thirty different individuals contributing to the discussion, which was terminated after seventy minutes for timetable reasons though with many students demanding that it should continue. The tutors were impressed at the obvious motivation and involvement of the students and with the realization that they had witnessed a formal, plenary session lasting over two hours, with a high level of debate, organized by first-year undergraduates.

The general opinion of the tutors in the plenary session was that most of the groups had produced very good answers to the original problem given that they were first-year students tackling a difficult problem using unfamiliar techniques. The tutors were particularly impressed by the quality and depth of the discussion which emerged at the plenary session and contrasted this with the absence of such discussion during tutorial periods involving the same students earlier in the year. A more detailed analysis of the subject-related aspects of the problem is reported elsewhere (McMillen and Moss 1980). It has to be emphasized that most of the syndicates were tutor-free and the tutors did not manage or participate in the plenary sessions.

9 THE ENGINEERING SYNDICATE STUDY

Gerald Edwards

This chapter, like Chapter 8, offers a report of a project rather than of a course following a syllabus. The time allocation for the project was equivalent to that of a major subject in the final year of a sandwich course. Students were grouped in syndicates of between six and ten members on the basis of their choice of subject area. Each syndicate had a tutor attached to it as consultant and assessor. Meetings were organized and controlled by the students, and their first task, after arranging a rota of chairmen and secretaries, was to select a practical problem of engineering design to work out in concrete form. Detailed guidelines were provided for assessing the work of every individual. The author reports a high degree of willing collaboration in the syndicates and improved capacity in the students to take an effective part in a professional discussion. The necessary change in role of the tutors concerned is emphasized, in acting not only as consultants but as assessors in a quite unfamiliar mode. (Editor)

THE ORGANIZATION OF THE COURSE

The Engineering Syndicate Study was first introduced into the final year of the BSc sandwich degree course in electrical and electronic engineering at the City University in September 1968 (Edwards 1974). Since then it has remained an integral part of the course and to date some sixty-one separate syndicates have completed their work, the number of students involved over the years exceeding 400.

The aim was to give the student:

- i An opportunity to produce, develop and test new ideas. This would help motivation.
- ii An opportunity to develop skill in communicating ideas, information and instructions, disseminating knowledge, understanding unfamiliar concepts and applying analysis and synthesis techniques.
- iii Experience of working closely with other people, functioning in a realistic situation, meeting mundane problems which can inhibit development, and overcoming these by flexibility in approach, innovation and careful planning.
- iv Contact with industry and other organizations and an opportunity of assessing the social and economic implications of a new design or product.
- v Direct personal responsibility for well-defined aspects of a co-operative effort.

It was acknowledged at its inception that this was an experimental teaching technique and a continual assessment of the experience gained has led to a change of emphasis and arrangement over the period. At first the suggestions for syndicate study subjects came from lecturers; the approach to organization was somewhat authoritative — the lecturer giving a lead to the group and taking the responsibility for distributing the tasks to members of the group — the end product being a group report which might quite commonly be a 'state of the art' account. This was quite useful but did not perhaps give the student as much scope for innovation as he might wish, or responsibility for decision-making, or experience of practical implementation of ideas.

A gradual evolution has led to the present approach, with the students being given complete responsibility for decision-making, including the choice of subject, method of working, distribution of tasks within the group, design of systems, development of ideas, practical realization of designs, costing, construction of prototypes, and selection of material for final report and conference. The only constraints placed on them are that the activity must be at an intellectual level commensurate with the final year of the degree course; it must clearly relate to engineering in the widest sense and the group must perform as a single, coherent entity.

The result of this change of emphasis is the considerably increased motivation of the students and a responsible, mature approach to the solution of real problems in engineering. In addition, frequent opportunities for genuine achievement and an appreciation of the importance of good communication and working with other people all help to convince the student (and his academic tutors) that this is a good preparation for his future engineering career.

A syndicate group normally consists of between six and ten members. The ideal number appears to be about eight, and where, for administrative or other reasons, the number might rise to twelve it is frequently advantageous to form sub-groups tackling related topics within the same subject heading. It is found that this partial sub-division tends to occur naturally anyway. One academic staff member is asked to join each syndicate as a tutor or consultant and, at a later stage, assessor. Students are allocated to groups on the basis of their choice of subject areas listed in order of preference.

The syndicate work is spread over the whole of the final year, meetings being held regularly, usually weekly, and the total timetabled contact hours being ninety. At present these are allocated as one hour per week plus a complete afternoon every five weeks plus a full-time period for about two weeks at the end of the session after the written examinations have been taken. As with other subjects, students would normally be expected to spend an equivalent amount of their own time on syndicate work and most of this would take the form of individual study or untutored sub-group meetings. It is essential that each group should plan its timetable

of work carefully in order fully to use the time available.

The meetings are organized and controlled by the students. Some degree of formality has been found to be helpful and the usual arrangement is for students to take the positions of chairman and secretary in turn in accordance with an agreed rota. Meetings outside the scheduled ones are naturally informal, as are the efforts of sub-groups and working parties set up to accomplish particular tasks.

The way in which the philosophy of group project work is presented to students is considered to be crucial. Students as a rule have a somewhat dependent relationship with academic staff in lecture, tutorial and laboratory activity. When they are told that in syndicate work the responsibility for their advancement in the subject is entirely theirs, then the reaction is initially one of surprise, and later wholehearted enthusiasm.

At the outset it is important to make the objective clear. The aim is essentially to 'learn by doing'; the subject must be chosen, studied, analysed and then, most important of all, the techniques and knowledge applied creatively to produce a practical result. The major end product may well be only a report giving details of the design or simulation of a new engineering system, or critical appraisal with constructive suggestions for modification of an existing system; however, the report must be backed up by firm evidence, usually in the form of working models, prototypes, or experimental results clearly demonstrating the viability of the proposals. Putting some emphasis on practical work of this nature not only enables some realism to enter into the activity but also brings about a need to approach and work with engineers in industry and other organizations. Financial constraints become evident and the importance of economic factors is highlighted by such contacts.

INPUT

Having explained the objective, the academic staff member responsible for organizing syndicate studies will ask the students to put forward ideas for investigation and may make some suggestions himself to start them off. Frequently a brief 'brain-storming' session can produce a dozen or so quite practical ideas worthy of further consideration. A better method is to ask the students to convene their own informal meeting to do this. At the next meeting with the organizer the list of possible subjects is whittled down by agreement to three or four, and the final subject area chosen by votes in order of preference.

It is emphasized that when each syndicate starts work on its chosen topic then detailed investigation might show a need to change direction, and this is certainly permissible, reflecting again the situation that frequently occurs in industry when costs, likely market requirements, results of feasibility studies, etc., become known.

It is at this stage that a syndicate tutor is allocated to the group. He is specifically asked not to lead the group and therefore it could be argued

that he need not have any special expertise in the area under study. Indeed it has been the policy of the City University Department of Electrical and Electronic Engineering to involve as many members of staff as possible in syndicate work over the years. This enables a wide range of thinking and experience to be brought to bear on this new teaching technique and on the whole the policy has proved its merit. Even so it is still practicable and sensible in most cases to allocate a tutor who has some direct interest in the subject chosen and will be able to make a useful professional contribution as a member of the syndicate.

The range of topics chosen for Engineering Syndicate Studies in recent years includes applications of solar energy, desalination, electro-acoustic control, remotely controlled wheelchairs, telephone exchange systems, wave power, remote control and metering in public utilities, digital TV techniques, and computer control of environmental services in buildings.

In general, students tend to choose subjects with considerable breadth. This may be due to the varied interests within a group (usually the syndicate will contain a mixture of students specializing in different areas, particularly electronics and power engineering) or it may reflect the practical situation that useful products or systems do require a combination of devices of different kinds — electrical, electronic, mechanical, acoustic, thermal, etc.

Also, students find that working on a 'socially responsible' task, such as aids for the handicapped, is particularly rewarding.

One of the aims is to link firmly the theory and practice associated with the subject under study. Where the required theory has not been given to the students, and may not even be covered by the degree syllabus, then they are expected to make good this deficiency by personal study, inviting lecturers both from the university and from outside to speak to them, organizing discussions with experts in the field, etc. Experience shows that students will exhibit considerable initiative in this respect and the tutor's guidance can be extremely important to them in such an activity.

PROCESS

It is essential at the outset to underline the importance of planning the work over the months ahead. To this end, and to ensure that each syndicate does schedule its work to meet the end-of-session deadline, a mid-session conference is arranged for about three months after the start of syndicate work. At this conference all current syndicates meet, and in brief talking and questioning sessions explain to each other their intentions for the remaining part of the session. This larger group meeting has proved most valuable for encouraging both decision-making and a further cross-fertilization of views over a wider field. It is not unknown for a slight atmosphere of competition between syndicates to become evident at this stage and this may give a little good-humoured edge to the critical appraisal!

The organizer, the syndicate tutors and any other interested academic staff would normally attend this conference.

The influence of a new teaching technique may well extend beyond the narrowly defined activity of the method itself. It may affect the student's approach to working and studying, change the atmosphere between students and staff, give both a fuller appreciation of the technical difficulties of communicating ideas, widen horizons, and provide a new insight into the relations between disciplines.

The student quickly realizes that group project work involves considerable individual study. The responsibility for searching the literature, understanding the topic, explaining this to his colleagues, putting forward new ideas and being prepared to defend or modify these in the light of new experience or information — this responsibility is not to be undertaken lightly. The way in which an individual student's personality develops in order to cater for this task is of vital importance in the successful operation of the group. Generally, the groups have been found to be extremely supportive in this area, with a good deal of help being freely offered and accepted within the syndicates. This may be because each person feels that, in offering to help, he in turn will receive help, and certainly this attitude leads to good cohesion within the team.

As with other group activities, the level of morale can fluctuate. A frequent danger is that due to over-enthusiasm the group may decide to tackle a problem which is way beyond its capability, given the time and resources at its disposal. Subsequent failure to achieve the stated goal can lead to pessimism and low morale. Although the staff tutor is asked not to take a leading role in the group, he can be invaluable in such situations. The problem may well be avoided if the tutor has the foresight to ask a question or two at the right time, to point out some likely practical difficulties ahead.

Another problem for the student is the amount of time he devotes to syndicate work. Since he is frequently trying out some of his own ideas, he may become so engrossed in the task that he spends more time on it than is strictly judicious, to the consequent detriment of his other studies. Again this is a situation which the tutor will watch and warn against, although in the nature of things it is not an easily quantifiable problem.

One of the main implications for the student is that he feels he is doing work which is directly useful and largely of his own choosing. His experience of learning in this way can help his learning through other methods, such as lectures, tutorials and individual study. His close liaison with other members of the group means that fruitful discussions of other aspects of the syllabus can also take place readily. Also his close contact with the staff tutor will encourage him to approach other lecturers in the same way.

A further implication is that the student improves his ability to express his ideas and thereby understands them better himself. A simple and obvious

by-product of the syndicate talks that a student gives is that when the time comes to give his major experimental project talk at the end of the session he has considerable experience in the art of oral communication and derives great confidence from his experience in the syndicate.

A somewhat more abstract but none-the-less significant aspect is the way in which a student has to allow for the personalities of his colleagues in the team, while the variety of view-points expressed brings home the realization that there are usually several ways of looking at the same problem. The importance of good judgement becomes apparent, particularly in situations in which all the pertinent facts may not be readily available or compromises may be necessary where there are conflicting requirements.

An important feature of the group project work from the student's viewpoint is the need for genuine co-operation to achieve a successful result. This is usually the only time during the undergraduate course when he is asked to contribute to a meaningful group effort on this scale, and yet he can expect to be asked to do this far more frequently once he is in industry. It is understandable that students in general feel that this aspect of syndicate work is not only enjoyable but good training for their careers as engineers.

An immediate implication for the academic staff tutor is that he is being asked to accept a role which is completely unfamiliar to him. The usual lecturer/student relationship has to be abandoned. If the tutor attempts to dominate the group then either he will succeed, in which case the group will acquiesce, become passive and uninterested and the whole concept of a co-operative activity will be rendered meaningless; or he will fail, in which case the group will rebel, and will decide that they have been misled into believing that they were being given real responsibility for the activity. The consequent friction will hardly be conducive to constructive effort. The lecturer therefore requires considerable sensitivity and adaptability in order to achieve the best results in his capacity as a group member.

Most lecturers welcome the challenge of a new role in a teaching process. They are both anxious and enthusiastic to learn how best to adjust to the new situation in the interests of student learning. Experience shows that academic staff are capable of displaying an imaginative approach to new teaching problems and the evolution of a successful teaching method is largely dependent on their expertise.

A major implication for the tutor is that he is obliged to think afresh about his method of assessment. As mentioned earlier he is given some guidance on this, but the final decisions are his.

Since there is an element of continuous assessment in marking the work done during the year, the tutor is obliged to note progress through the year (the syndicate's minutes of meetings being a help in this). A common reaction is that the pleasure of joining in the group work and observing the students' maturing efforts is marred a little by having to make this assessment at the end. Nevertheless it is essential.

PRODUCT

Each syndicate is expected to produce a report, the suggested length being about 2,000 words per member, containing identifiable contributions from each member, although not in individual essay form. Indeed, editing of the final report by a sub-group is encouraged in order to produce a coherent, well-written result. Judgement regarding the contests needs to be exercised by the students since the material has to be carefully sifted and reduced to meet the requirement of length.

End-of-session syndicate conferences are also organized, one for each syndicate and usually lasting for up to three hours. At this conference a group is asked to present its findings, ideas, designs, conclusions, etc. to the general academic community. Working models, demonstrations and visual aids are valuable in making the presentation interesting. Again, considerable judgement is required by students in deciding how to compress the essentials of a year's work into a few hours.

Table 9.1 gives a summary of the various stages in the progress of an Engineering Syndicate Study with an approximate timing for each stage.

The report and conference presentation are specified requirements of the Departmental Board of Studies that a student must meet in order to qualify for a pass in Syndicate Studies. In practice the output is frequently in more tangible hardware form, sometimes of interest to co-operating industrial organizations. Often the report itself is a valuable reference work for future projects, research or teaching.

Assessment of individual project activity is inherently difficult because of the difference in the type of work carried out by one student compared with another. This is true also of group project activities, compounded by the fact that relative merits both within the group, and between groups, have to be taken into account.

It is a primary axiom that if an activity is considered valuable in education or training then difficulties in assessment should not be allowed to inhibit its use and development.

In practice a useful approach to assessment is to split up the activity into the three main areas:

- A Work done during the year
- B Contribution to the written report
- C Contribution to the end-of-session conference

The total maximum marks for Syndicate Studies is the equivalent of one written examination paper. The detailed marking scheme is left to each individual tutor but it is suggested to him that for each student he should consider whether the features listed in Table 9.2 are present or applicable, and to allocate appropriate marks for them. A division of marks on the basis of 40 per cent for section A, 40 per cent for section B and 20 per cent for section C is common.

Week number (approx.)	Activity
1	Introduction Aims Range of studies
2	Choice of study areas Formation of syndicates Allocation of tutors
3-11	Student discussions, literature searches Seminars, dissemination of information Evaluation of possible specific objectives Contacts with industry Visiting lecturers, visits
12	Determination of specific objective Planning/timetabling Report and discussion in mid-session conference
13-33	Detailed design Experimental work Construction and testing of prototypes, simulations Further liaison with industry
34-35	Completion of construction and testing Preparation of written report
36	Preparation for conference Presentation of findings at Syndicate Conference

Table 9.1 Stages in the progress of an Engineering Syndicate Study

When several syndicates exist, the reports are read not only by their tutors but also by two other lecturers not currently involved in syndicates but experienced in the work. These act as 'external examiners' and are expected to attend all the conferences, and to ask whatever questions they wish. At a later, co-ordinating meeting of the syndicate organizer, tutors' and examiners' views are expressed regarding the relative merits of the various syndicates and the tutors invited to take these into account in their final marking. In this way a measure of 'group assessment' may enter into the scheme but certainly the co-ordination does tend to ensure that similar yardsticks are applied to all groups.

Although the assessment of a group activity is not easy, the process is helped by evaluating the features in Table 9.2. The weighting given to each feature depends to a certain extent on the nature of the Syndicate

Tutors are invited to consider whether the following features are applicable to their particular syndicate, and if so to use them in their marking scheme.

SECTION A WORK DONE DURING THE YEAR

Preparation

- a Producing preliminary ideas for discussion.
- b Organization of self-study; preparation of material.
- c Thoroughness of literature search.

Communication

- d Contributions to discussion; response to ideas of other people.
- e Ability and willingness to communicate and disseminate knowledge.
- f Planning and management of group activity; role as chairman, secretary, motivator.

Engineering approach

- g Ability to comprehend ideas, techniques, technical equipment.
- h Technical ability in designing or using equipment.
- i Judgement in assessing value of tests, appraising discussions, seeing flaws in arguments, etc.
- j Originality and creativity; problem-solving ability.
- k Others (please give details).

SECTION B WRITTEN SYNDICATE REPORT

Clarity

- a Clarity of expression; precision; brevity.
- b Ability to select and condense information and to present this in a useful form.
- c Quality of diagrams.
- d Use of references.

Project assessment

- e Technical merit; level of work undertaken.
- f Conclusions; critical review of achievement.
- g Suggestions for further development.
- h Group mark for cohesion, editing, selection of topics, emphasis.
- i Others.

SECTION C SYNDICATE CONFERENCE

Organization

- a Preparation and selection of material for Conference.
- b Organization and planning.
- c Initiative and enthusiasm.
- d Demonstrations and models — effectiveness and suitability.

Performance

- e Lecture presentation.
- f Contribution to visual displays.
- g Answering questions.
- h Effectiveness of coverage of work done during the year.
- i Generation of interest amongst audience.
- j Others.

Table 9.2 Engineering Syndicate Study assessment

Study. Since group work of this kind fosters qualities important to engineers but which may not figure largely in written examinations, such as communication skills, co-operation, ability to participate in discussion and appraisal, decision-making, innovation, etc., then a strong correlation between syndicate study and examination marks would not be expected. This is also the impression gained from experience and appears to be confirmed by a previous study of the marks obtained by students on a test of comprehension and analysis compared with traditional examinations which showed no significant correlation between them.

Peter Chambers

This chapter records a co-operative exercise carried out in six colleges of education over a period of five years, where lecturers in the sociology of education organized their courses on a syndicate basis beginning from a syllabus and set of assignments published by myself (Collier 1968). An early attempt to define the objectives of the work in behavioural terms and to identify standardized tests by which to assess students' development in the cognitive and affective domains is reported. Various tests were subsequently devised to record the subjective responses of the students and the results are described. A further stage in which two part-time researchers were funded by the DES for one and a half years to study the effects of this innovative technique in the six colleges is reported. The reports indicate how rapidly the course content diverged over the period; how widely the responses, and the effectiveness, of the syndicates varied; and how greatly the tutors' personal styles and the institutional cultures and sub-cultures influenced the work of the syndicates. (Editor)

THE ORGANIZATION OF THE PROJECT

This scheme began when representatives from six colleges of education met in 1970 to explore the ways of using syndicate methods in teaching the sociology of education. Members of the group had several aims in mind: promoting innovative teaching; assessing the usefulness of syndicate techniques for improving teaching and learning; achieving economies of time and effort through co-operative planning of courses and preparation of materials; and enriching the members' understanding of the potential and the problems of the technique, and of its influence on students and teachers, through regular exchanges of experience.

A common framework of topics for this introductory course was devised:

- Social stratification
- Social mobility and education
- The organizational structures of schools
- The roles of the teachers
- Power, authority and discipline
- Social values and education

Individual colleges prepared 'study packages' on different items and these were pooled and then implemented appropriately. Exchanges of ideas

and materials led to the varied development of similar courses in the six separate colleges. What was perhaps most noteworthy was the variety of learning approaches built into the packages, which included watching film, following prepared lists of readings from a range of sources (including journalism as well as scholarly writing), constructing flow diagrams and models, presenting and sharing empirical data, role playing and simulation, and writing reports. Experience with these forms of instruction and learning led to a reduction in the actual number of assignments required in the course and to a simplification of the concepts examined. The advantages of individual initiative became obvious as the 'man-on-the-spot' was in the best position to respond sensitively to feedback from students and could modify the materials appropriately. The divergences that arose were monitored, and demonstrated how powerful the autonomy of institutions and the need for spontaneous response by tutors were in determining curriculum.

It became clear that the content had to include tasks or assignments that gave students experience of syndicate methods and indicated some of their objectives. The advantages of experiential learning of this sort have been discussed elsewhere (Collier 1968), but there is a particular advantage in making this explicit (Whitbread 1970). In particular, the topics of role, of the exercise of power and authority, and of organizational values, had to be handled explicitly in the implementation of the syndicate exercise itself.

Attempts to assess the effectiveness of the course were started immediately and were continuous, various efforts being made to obtain systematic data. Students' opinions were sounded and records of their reactions kept methodically. Comparisons of their examination results with those of other students were made and checks on the grades awarded to syndicate assignments were recorded.

There was lengthy discussion of the different existing approaches to evaluation. The first approach adopted was the prevailing transatlantic method: defining the objectives of syndicate methods and using existing standardized instruments to test their influence. The group then moved on to the designing of an open-ended questionnaire, applied on a pre-test/post-test basis. A third tactic was the preparation of a simple attitude scale. Finally, a modest research and development project was launched, funded by the DES and consisting of a series of case-studies based on the 'illuminative' method of evaluation (Parlett and Hamilton 1972). Brief accounts of the four phases follow.

THE DEFINITION OF OBJECTIVES

The determination of objectives in behavioural terms (Mager 1962) was acknowledged as a time-consuming and exacting activity. The progress made was slow and the difficulty was magnified by the global nature of the enterprise and some uncertainty among the participant tutors about what they expected to get out of what was then a relatively new, untested method of teaching. A further difficulty was caused by the intimate relationship

between the objectives of the method as a specific exercise and the more general objectives of the total process of preparing teachers through the field of educational studies (see for example Chambers 1971). Nevertheless, a set of objectives based on Bloom's *Taxonomy* (1956) was drafted as follows:

- 1 To generate in students a greater degree of motivation, of involvement, of personal interest in their studies than the more usual approaches.
In so far as this occurs they may
 - (a) show a more active and responsible concern for their own studies;
 - (b) develop greater initiative and skill in organizing their studies;
 - (c) read more purposefully and critically;
 - (d) generate greater activity of mind, more intellectual and imaginative energy, greater fertility of ideas, more divergent thinking; and
 - (e) spend more time on the work concerned, with less sense of pressure and more satisfaction.
- 2 To generate in the students a more active interweaving or interrelating of general principles and other 'bookish', 'theoretical', 'academic' material, with first-hand experience, personal responses, and concrete practical applications or examples of the general principles. In so far as this occurs, they may be expected to
 - (a) improve their powers of judgement;
 - (b) learn to make a critical assessment of evidence and ideas;
 - (c) improve their articulateness and clarity of thinking, both in discussion and in writing;
 - (d) translate material from the formal, 'bookish' language of academic sources to the students' own personal 'active' language;
 - (e) weld general principles into the fabric of concrete personal experiences, making abstract principles part of their own mental furniture;
 - (f) make academic, 'bookish' study more meaningful in terms of personal interest and experience;
 - (g) develop greater capacity for applying learnt material in fresh situations; and
 - (h) bring about greater integration of contrasting materials from diverse sources, whether from different subjects or disciplines, from different viewpoints within a single subject, or from the different viewpoints of individual members.
- 3 To foster more adult relations between tutor and students.
These methods may
 - (a) lead members to form their own views, based on suitable sources, before hearing the tutor's views;
 - (b) enable individuals to have the support of other members of the syndicate in face of the tutor's academic authority;

- (c) place the tutor in the position of guide and adviser, rather than instructor, as he provides material for their study, visits the syndicates at work, and reports on their findings; and
- (d) provide for fuller feedback from students to tutor, particularly through their syndicate reports.

When the effort to draft a set of objectives reached the stage illustrated by the above chart the group decided that these epistemological considerations should be subordinated to a more operational approach, namely to try to evaluate the experience of the group in the light of hypotheses about the influence of syndicate methods on the students' knowledge of sociological concepts, on their capacity to make independent judgements, on their attitudes to learning, on their understanding of group and co-operative methods, and on their appreciation of the relevance of the material to school situations. Nevertheless, the exercise of attempting to define objectives in Bloomian terms did establish a framework of shared concepts and shared perceptions.

Some attempt was made to employ standardized instruments and a comprehensive search was carried out, but this was not very rewarding. It was soon obvious that the group had to construct its own instruments and different members did so.

THE OPEN-ENDED QUESTIONNAIRE

A questionnaire was devised in which students were asked to rate different aspects of syndicate work on the basis of a calculation whether they had gained more or less from the experience than from a course based on the customary lectures and discussions. It was administered to students after they had completed the syndicate project. It included knowledge of sociological concepts, interest in sociology, understanding of group and co-operative methods of learning, appreciation of the relevance of the material to classroom work, and stimulus to thinking. Additionally, students were asked about the amount of work demanded, about the time spent on the work, about the use of books and articles, and about the relative effectiveness as preparation for examinations. They were then asked to identify what parts were felt to be most useful: the assignments, the exchange of ideas within the syndicates, the reporting back, the listening to other students' reports, the interventions by tutors, and the integration of the exercise. Finally, they were asked to estimate what effect the work had had on their relationships with their tutor.

The questionnaires were administered in different institutions by different tutors and no strict controls were exercised as to the mode of administration. Nor was any test of reliability carried out. The figures simply represent the subjective responses of students addressed to the tutor in charge of the course. They serve two purposes: to indicate the intensity of response on particular aspects of the work; and to illustrate the wide

variations in the distribution of positive and negative responses. These points may be illustrated by the following figures selected from the rather large quantity of results.

	College A						College B				College C	
	1970		1971		1972		1971		1972		1971	
	More	Less	More	Less	More	Less	More	Less	More	Less	More	Less
Do you consider that you have gained more or less from the syndicate method than from a more conventional course in respect of:												
(a) Your understanding of group and co-operative methods of learning	20	0	37	6	62	2	36	5	46	2	34	29
(b) The stimulus to your thinking	14	0	29	6	38	19	27	9	48	1	46	29

Two features stand out. First, the strikingly positive responses recorded on item (a) by college A and college B in the years recorded and on items (b) by college A in 1970 and 1971 and college B in 1971 and 1972. Second, however, we see a marked contrast between these figures and those recorded for item (b) by college A in 1972 and for both items by college C: a contrast which is repeated in other sets of results and which raises questions about (among other things) the possibility of influential variations in circumstances between the colleges.

The firmest impression derived from tutors' observations, students' oral comments and the overall results of the questionnaires was that when the syndicate work was well organized, directions clear and materials and literature readily available, the majority of students found the experience satisfying and appreciated the opportunity to exchange ideas with their peers in ways that had advantages over conventional courses. This view coincides fairly closely with that reported by Newhouse, quoted in Chapter 2 (Newhouse 1978). There also appeared to be a slight trend for repeats of the exercise to produce more favourable responses from new groups of students. This confirmed the early impressions of some members of the group that a tutor's increasing familiarity with the objectives, the administration of the exercise, and his or her own role within it paid off in terms of consumer satisfaction. It was felt by the staff of college A that the figures quoted for item (b) in 1972 were possibly to be attributed to changes in tutorial staff and organization.

THE ATTITUDE SCALE

The impressions recorded above coincided with those based on the results of the attitude scale. This was drawn up in the form of eleven statements with which students were invited to express strong agreement, agreement or disagreement. The statements were derived from forty-six draft statements which were grouped and combined by a panel of thirty-two judges, sixteen of whom were students with experience of syndicate work and sixteen were lecturers in education. The test was in most cases administered twice to each year group, first in the third week of the exercise in order to give students a reasonable idea of what syndicate work involved, and secondly after the exercise was completed. The first exposure was treated as a pre-test and the second as a post-test.

Again a small selection of figures has been made, to illustrate student response.

	College A 1971						College B 1971						College C 1971					
	pre-test			post-test			pre-test			post-test			pre-test			post-test		
	as	a	d	as	a	d	as	a	d	as	a	d	as	a	d	as	a	d
It is helpful to test out one's ideas with a fellow student	28	49	1	23	47	5	19	25	3	16	36	2	19	34	1	67	120	9
There is not enough time in syndicate work to cover any topic in depth	48	25	5	44	30	2	16	27	4	5	27	22	13	29	12	113	68	15
Syndicate work gives very little help in preparing for examinations	11	39	24	15	40	16	7	20	20	2	11	41	3	7	44	91	65	40
Some students never do any work during a syndicate exercise	9	46	22	20	39	16	25	17	5	2	15	37	8	17	29	59	87	50

as = agree strongly a = agree d = disagree

The differences in numbers of responses between pre-test and post-test for college C are due to the fact that it was only practicable to give this test to two classes of students in the pre-test.

In the first two items of the above we see general agreement that the testing out of ideas with fellow students was of value, and that there was inadequate time to cover any of the topics in depth. With regard to the preparation of students for examinations there is considerable divergence

of opinion. Students' comments in conversation indicated that the syndicate assignments were perceived as less structured and systematic than tutor-directed teaching and were consequently thought to be less useful for revision. Examination results, however, showed no clear differences between the syndicate-based classes and the rest.

The substantial numbers of students expressing agreement with the statement that 'some students never do any work during a syndicate exercise' point to a problem about which many students appear to feel strongly, yet which scarcely features in the material emerging from the case studies which are reported later in the chapter.

Two colleges compared the figures yielded by the attitude scale for different classes engaged in syndicate work and found considerable divergences. In the first place some of the variations appeared to reflect the composition of the classes: in certain cases classes of students working for a BEd degree appeared to respond more positively than those working for a Teacher's Certificate; and women's classes tended to score more highly than men's classes. Secondly, however, the variations were of such a nature as to suggest quite strongly that certain tutors elicited more positive responses to the technique than others, and that the tutor variable was of great importance. Previous attempts at evaluation drew attention to the problem of role attachment (Goffman 1961) to syndicate methods, ie the extent of the tutor's commitment to this approach. Tutors who were 'drafted' to syndicate groups reported more frequent problems of hostility, lack of impetus, difficulties of organizing materials and examples of non-cooperation between students than did 'volunteer' tutors. The differences in class scores did, in the opinion of the course organizers, reflect the experience and degree of psychological involvement in the method of the tutors concerned in the exercise.

Thus, although these two instruments did not produce hard evidence, they did suggest certain features of the method that were worth closer examination, notably the composition of the syndicates, the attitude of the tutors, and the general culture of the college. Since these were most likely to be influenced by the policies and outlooks of the individual college communities and affected by the constraints and opportunities presented by the different institutions, the development of precise psychometric instruments did not appear to be an adequate method of inquiry: the data still needed to be explained in terms of the particular academic culture which produced it. The group concluded therefore that such evaluation techniques as could be developed needed to make use of existing methods of quantification, but also had to take into account the unique educative process of each institution.

THE CASE-STUDY APPROACH

Following this part of the inquiry, DES funding was sought to conduct intensive case studies of the colleges using 'illuminative evaluation'

techniques. This was subsequently written up by the two part-time evaluators, Gordon Lawrence and Philip Robinson, as a study of the implementation of an innovation (Lawrence and Robinson 1975). This part of the inquiry, which was shaped by the original group, concentrated heavily on the institutional aspects of innovation rather than on the syndicate processes themselves, and this chapter records only those findings relating to internal processes. Certainly, this evaluation did confirm the distinctiveness of institutional learning environments, although there were clear indications that syndicate learning helped to open up 'closed' learning systems and provided better preparation for uncertainty and change than more conventional teaching strategies. The case studies highlighted these aspects by identifying the tension between participants who were seeking a well structured and tidy programme of syndicate assignments and those more concerned to explore the socio-psychological dimensions of experiential learning. What the studies revealed was that this was not a simple function of tutor personality, nor even of the interaction of tutors' personalities with those of their syndicate groups (Fiedler 1965), but of the institutionalized expectations of legitimate learning within each college and manifest in its 'culture' (Lawrence and Robinson *ibid.*). For example, one institution where the initiative for the introduction of syndicate work had come from the Principal, produced evidence in its tutors of ambivalence towards the project, which in turn was reflected in student attitudes and achievement. The interpretation of learning packages was more mechanical than in another institution in which the 'grass root' tutors had initiated the syndicate project.

In another institution, the researchers reported that the material specifically prepared by that college's own tutors was the most successful of the total programme being followed by the students (which included the common material originally prepared by the group). In another instance a college with a strong professional flavour to its educational studies work appeared to stress applications of knowledge much more than one whose academic traditions gave strong support for a large Robbins-type BED programme. In yet another case, where the orientation of the college was strongly towards the students' 'main' or specialist subject, which was to a great extent the basis of the students' self-identity, the students were not readily able to see the relevance of educational studies to their work as teachers.

Detailed examination of the institutional profiles presented in these case studies revealed a range of similar variations. Disparities in the choice of content, in the pedagogic roles adopted, in the values projected, in the amount of time available, in the interpretation of how the syndicate method operated, in the techniques of evaluation used and in the degree of 'success' acknowledged were characteristic of the practices described and, in case after case, those disparities could be attributed to the 'constitutive symbolism' of the particular college culture (Parsons 1966), which reinforces

in staff and students their sense of collective identity, for example through traditional rituals, as with designating and timetabling particular rooms for high status subjects. Nevertheless, the case study inquiry confirmed most of the evidence gained from the earlier studies, recognizing the problematic nature of quantitative evidence, but supporting the view that syndicate methods do offer students certain insights into their preparation as teachers not yielded by other approaches to the organization of their learning, giving them — for example — greater opportunity to appreciate the advantages of interpersonal co-operation in organizing learning and to identify the problem-solving nature of most learning situations. The results suggest that syndicate methods raise certain problems about how the academic material studied is consolidated. One suggestion, that an uncomprehending adoption of the language of — in this case — social science might be the end-result of this syndicate approach to the sociology of education, confirmed the views expressed in the questionnaire. The inquiry did, however, also support the conviction that students undertook more reading and appeared prepared to think about the related issues with greater perception, but only if their tutors had become more skilled in the methods and were able to solve the organizational problems of giving ready access to learning materials and books.

The co-operative exercise here reported was wound up in 1975 following the massive reorganization of colleges and courses that resulted from government intervention (see the DES White Paper *Education: a Framework for Expansion* 1972). The exercise did, however, demonstrate certain results. It showed that the objectives of such methods involved the affective domain as much as the cognitive. It showed that the fostering of independent judgement in students led to change in the intended learning outputs as the exercise unfolded. This had repercussions in the total learning environment which made the formulation of precise objectives so difficult that it became necessary to limit the activity to the posing of hypotheses about the learning experience, that took into account not only the entering behaviour of students but also the nature of the institutions themselves. This in turn affected the evaluation procedures, and although a psychometric approach involving the use of questionnaires and tests did yield some useful evidence, their value was in effect restricted to their contribution to formative evaluation (Scriven 1967; Parlett and Hamilton *ibid.*). The tutors themselves had to be employed in the evaluation process and, no matter what methods were used, the institutional aspects of the teaching had to have predominance when it came to assessing the work. This commitment to evaluation and the involvement with the visiting evaluators created its own tensions; in addition sensitive issues relating to power and authority did emerge which were not adequately resolved.

Students revealed anxieties about the amount of sociology they learned, and although comparisons of their results with other students in both course work and examinations showed these fears to be groundless, some way of

resolving such anxieties needs to be found. If material is carefully selected to meet the working pace of the students and these conditions are related to assessment procedures, the problem can be reduced. Methods of handling the material need to be as varied as possible and should, if possible, be derived from shared experiences of a non-bookish nature: carefully constructed case studies (such as a study of role ambiguity which described the impact of an innovative head on a conservative teacher) and role-playing exercises proved successful in developing clear concepts. Instructions for both staff and students about how to carry out the exercise need to be as full and as precise as possible and the detailed organization and administration of books, references, study materials, assignments and follow-up exercises must be immaculate. Finally, improved techniques in co-ordinating and disseminating information gathered by the different syndicates need to be employed, either through the plenary session or written reports, so that each student can establish a systematic and structured outline of the total course. Whenever possible, a common final session should be arranged to allow the different experiences to be integrated into some coherent whole. With these provisos it is clear that syndicate methods represent an effective way of teaching the sociology of education and contributing to the professional preparation of teachers.

11 THE INFLUENCE OF EXAMINATIONS

Iain Rodger

This chapter records the experience of one of the colleges that took part in the six-college project described in Chapter 10. The tutor concerned used the syndicate technique with conspicuous success during the project but, on re-introducing it when the college had merged with another college and the course had been converted from a Teacher's Certificate to a BED, he found a very unsatisfactory response. He attributes the difference partly to the students' perceptions of their examinations and partly to the marked change in institutional culture. (Editor)

The experience here reported took place in 1973-75 and 1977-78. The earlier stage was organized in the context of the six-college project described in Chapter 10. Although the college, Bede College, Durham, had been involved in that project from the outset through the principal, Mr Gerald Collier, the sociology of education course at Bede had continued to be taught on the same lines as the other sections of the course on educational principles: weekly 45-minute lectures were given to the whole year group ('year lecture'), followed by discussion in groups of about twenty students. When the group of tutors conducting the six-college project decided to undertake a series of case studies Mr Collier invited the two sociology lecturers to join the project, and this my colleague Jack Newhouse and I agreed to do. As a transcript of an interview carried out by one of the evaluation team at the time records, one of us remarked, 'I was perfectly happy with the system we were operating. It was still working well and I did not see any reason to change, but I was willing, ultimately. We would give it a whirl. We will try this thing conscientiously and see how it works out' (Lawrence and Robinson 1975)

Because two out of eight groups of students were being taught in an entirely different manner from their colleagues it was decided that a detailed explanation of the aims of the project should be provided for participating students and that any student objecting to being involved could transfer to another group. So a fairly lengthy session was held in which a full description of the course and its rationale was given. No student objected to being assigned to a syndicate-based class, and indeed the idea of being freed from year lectures was generally welcomed; but some concern about assessment was expressed. Normal practice was for each course on theory of education to be accompanied by an essay assignment. This was felt to be inappropriate for syndicate-based teaching and so the students were

informed that assessment of the course would be based upon their contribution to the work of their syndicate rather than on separate essay assignments. Although there were no second-year examinations, some assessment procedure was necessary since selection for the BEJ course in the third and fourth years was based upon departmental recommendations using continuous assessment as the major source of data. Thus the fact that these two groups of students would be freed from the essay writing tasks of their colleagues, and that there was a feeling current among the student body that tutor assessment produced higher grades than did essay marks, meant that course assessment was never a major source of anxiety for the students, and indeed in the early days of the project membership of a syndicate-based class was itself a positive motivational factor. Such students felt relatively privileged.

Although the project took place against a climate of uncertainty for colleges of education and a member of the evaluation team was often present in working sessions, it was generally considered by the staff involved and by most of the students to have been a success. The evaluators, whilst having reservations about some of the materials used, noted, 'the tutors working at this college were both pleased with the way the project had gone during the term; they felt that students had read more, were thinking about the material and beginning to form their own opinion as to its validity' (Lawrence and Robinson *ibid.*). In a memorandum written at the time it was also felt that personal relationships between staff and students had been enhanced by syndicate work and the quality of the students' analysis of the academic material improved considerably during the lifetime of the project. A videotaped discussion after the completion of the course, with a representative group of participating students (chosen by themselves and with the tutors concerned not present), confirmed the impression that as they became more familiar with the organization and aims of the course they became less concerned with 'right answers' and more appreciative of the opportunities provided for making their own judgements and developing their own ideas.

Given the perceived success of this method of teaching the sociology of education, it was repeated in the following year with the equivalent second-year students, and again some measure of success was recorded (Newhouse 1978).

Following this, however, events began to overtake the college. In September 1975 it merged with its sister college of women students, the principal, Mr Collier, retired and the Teacher's Certificate began to be phased out, to be replaced by a new unit-based BEd degree course for all students, validated by Durham University, in which each unit or half unit of study was examined at the end of the academic year. It was felt to be unwise to continue with what was essentially an experiment in this unsettled climate, but in the second full year of the new BEd (1977-78) I did reintroduce syndicate methods for second-year students in the sociology of

education.

Educational theory studies in the new BEd involved a common first-year foundation course to be followed in subsequent years by optional studies of the educational disciplines. As sociology tended to be a popular choice for students the second-year group was large enough to operate as two classes following a common syllabus, one taught by myself and the other by a colleague from the sister college who had neither knowledge of nor interest in syndicate techniques. He lectured in the traditional manner whilst I developed a considerable amount of new material and sought to use syndicate methods for the whole of the 24-week course.

It soon became clear that the successful experience of earlier years was not to be repeated. In a memorandum to the head of department towards the end of the academic year I noted that syndicate discussions and the exchange of ideas and interpretations had become subordinate to extensive note production and circulation; that students had become highly dependent upon the tutor and sought the 'right answers' or the 'official interpretation' much more frequently; that group identification had not developed to anything like the same extent as in the previous experience of syndicate work, with individuals beginning to opt out of syndicate tasks to pursue their own course of study; that staff/student relationships were beginning to suffer; that there was a constant referral to the work being done in the parallel group; and that, perhaps most significantly, the advent of the examination brought requests for lectured revision sessions.

It was my firm belief at the time that the formal examination system, with a three-hour written paper being required by the degree regulations, and the fact that all other groups in their year were being given formal lectures directed towards these examinations, produced strong feelings of anxiety and isolation among the syndicate-based students, which were exacerbated by the belief current among the student body that these examinations were to be particularly rigorous. Given what can only be described as student resistance I reluctantly decided, at the end of my 1977-78 course, to abandon syndicate methods in favour of more formal and traditional procedures.

It is perhaps worth noting that no student failed the sociology of education examination in either of the groups and that there was no statistically significant difference between the means of the marks awarded to the two groups of students.

However, differences in methods of assessment offer a simplistic explanation of the differential experience with syndicate methods encountered in these two contexts. There were further differences between the two courses which also need to be considered. For example, in the merged college situation, two separate education departments with different traditions, attitudes and commitments towards the teaching of educational studies had come together, with obvious conflicts of interest and of ideology (Smith 1977). These tensions at staff level may have emerged during the

students' foundation year and given rise to some of the anxiety and uncertainty noted earlier. Similarly the student body was quite different in the new college. It had changed from being a men's college, the majority of whom entered with a minimum qualification of five 'O' levels and gained a Teacher's Certificate, to being a mixed, completely BEd cohort who all had at least two 'A' levels. This produced a change of ethos noted by most tutors at the time of the merger and no doubt indicates a whole range of personal and attitudinal differences which are of consequence but are outside the range of this inquiry. Finally it should be noted that in the Teacher's Certificate courses syndicate methods were encapsulated within the work of one semi-autonomous department within a free-standing institution. There is evidence that an innovation occurring within a stable institution often acquires a kind of 'defensive ring' which protects it from external scrutiny and threat: as is illustrated, for example, by Jenkins's work on the Keele Integrated Studies project (Shipman et al. 1974) and some of the case study material from the Humanities Curriculum Project (Rudduck 1976; MacDonald and Rudduck 1971). Lawrence and Robinson (*ibid.*) call this the 'encapsulation' process. By the time of the BEd experience the institution was no longer as stable as it had been and did not therefore have the institutional characteristics or resources to form the 'defensive ring'. Also the syndicate approach no longer retained certain of the characteristics of innovation: it was no longer new to the staff concerned; it did not have a team of product champions; there was no external or semi-external change agent present; and it had not been 'sold' to the students as an experiment. In addition, the departmental structure became much less significant, the unit-based nature of the new degree brought both teaching and assessment under much more public scrutiny and the fact that now only one tutor was using syndicate methods while the other was not, emphasized the difference and accentuated the vulnerability of the approach.

All these factors were, no doubt, influential in producing the experiences described above, but the abiding feeling is that it was the nature of the assessment procedures which, more than anything else, became the focus for resistance to the kind of learning aimed at by the teaching style (Fransson 1977).

There is evidence to suggest that modes of assessment do significantly influence the type of learning which students will undertake. Marton and Saljö, for example, show (1976b) that what a student will learn will reflect that student's conception of what is expected of him in terms of evaluation. This would seem to support the view that the students working for a BEd perceived, rightly, that assessment would depend upon their ability to reproduce in a formal examination material based upon the literature of the topics studied and that they therefore sought lecture notes and other material which they could later regurgitate in order to satisfy the examiners. If we carry this analysis a step further it would appear that the students

rejected the prospect offered by the syndicate exercise for a deeper understanding of the issues presented to them. Thus the aim of the original project, based on increased motivation and involvement on the part of the students, on an increased integration of personal experience with academic material, and on the development of maturer staff/student relations, became subordinated to the need for 'answers' which could be produced in the examination.

It was always recognized that syndicate methods were unsuited to traditional examination procedures: 'Most examinations still assume a regurgitation of material which is thought appropriate ... traditional examination reflects the teaching strategies which precede it; whilst one of the intentions of syndicates is to break this pedagogy' (Lawrence and Robinson *ibid.*). Using Bernstein's concepts of classification and framing (1971) it is possible to conceive of syndicate methods as involving a weakening of classification, ie of the sharp definition of subject-matter boundaries, and of framing, ie of the sharp definition of the tutor's control over the student's learning. Thus the boundaries between what is and what is not to count as appropriate knowledge are open and there is little restriction as to what views of what aspects of the subject may or may not be developed during the course, or on the way the tutor as teacher and the students as learners develop their relations in the teaching process. It is partly in this intended weakening of the classification and the framing that the innovative nature of syndicate methods lies, and it is obvious that assessment procedures should, ideally, take account of this aspect of the course of study.

Another point, however, must also be made. There was a contradiction here between, on the one hand, an 'invisible' pedagogy which emphasized a personal response to knowledge, to evidence and to ideas on the part of the student, and on the other hand an assessment procedure governed by a 'visible' pedagogy which emphasized the firm boundaries and sharp criteria of a formal university examination (Bernstein 1973, 1975). That is, syndicate methods in higher education involve more than innovation in teaching styles. They are linked to the power relationships made manifest in assessment procedures and where there is too great a discontinuity between pedagogy and evaluation students will as always 'adopt an approach determined by their expectations of what is required of them' (Marton and Säljö *ibid.*).

12 THE TUTOR'S ROLE

Glyn Owen

This chapter is based on eleven years' experience of syndicate methods in a co-educational college of education. The college was one of the six colleges referred to in Chapter 10; it used the technique more extensively than the others and continued after the termination of the project. Two sections of the chapter are particularly significant: first an analysis both of the students' and of the tutors' perceptions of syndicate-based study; and second an outline of a typology of tutors' approaches to this work. (Editor)

One of the colleges that joined the six-college project, St Kathrine's College, Liverpool, has succeeded in maintaining the impetus of the syndicate-based course up to the time of writing. From 1970 to 1976 the college was a co-educational college of education, the majority of students taking a Teacher's Certificate and a minority a BEd degree. Since 1976 the college has been a constituent college of an institute of higher education, a federation of three colleges offering courses for BA and BEd degrees. Starting in 1970-71 with one tutor and twenty-five students, the Education department gradually extended its involvement with syndicate work until in 1976-77 nine tutors and 180 students were engaged in it. All second-year BEd students in the institute now take the one-term syndicate-based course in the sociology of education.

'How to tell students what to look for without telling them what to see is the dilemma of teaching' (Abercrombie 1969): this is very much the dilemma facing a syndicate tutor in a role which Lawrence (1971) likens to that of an executive who has 'responsibility for the total learning situation, since he has some idea as to what it can become in the future, holding some vision as to its potential, and so his conduct is directed towards realising this potential. His job is to experience, observe and assess the reality of the momentary situation and read this back, if it will help the syndicates in their task, to the members'.

In syndicate-based work the pedagogy is less 'visible' than in courses based on a knowledge-transmission model; however, far from signalling the tutor's demise, it calls for new management skills. 'Open' learning, paradoxically, demands very careful structuring of tasks, selection of appropriate resources, and management of the conditions for learning if students are to be sufficiently free and confident to strike out along *their* cognitive route rather than follow the tutor's.

But allowing students space and time in which to order their own

learning and 'make sense' in terms of their own existing understandings does not mean that syndicates are abandoned to their own devices. Far from it. The 'executive' role, as compared with that of lecturer/seminar leader, requires the tutor to make a heavier investment of 'self' in the teaching activity. It involves, too, a greater exposure of 'self', the engagement of a wider range of one's capacities — not only intellectual but social and emotional — in one's interchanges with students. It calls for skill in managing one's own participation in the role and an awareness of one's own motives, so that one can make an informed judgement about where to hold the balance between student security and anxiety; between intervention and withdrawal; between 'taking' student feelings and deflecting them; between injecting social reassurance and choosing to ignore the imminent collapse of a syndicate, in its own interests. Familiarity with all components of the course content, allied to basic administrative competence, are essential if a tutor is to be used as a credible resource. Merely co-acting with students and muddling through administratively are not enough; if the task is not understood, or if the right materials are not available, student organizational anxieties are so great (especially in the early weeks) that the whole method is at risk. Finally, there is the need for commitment to the role of syndicate tutor: not in the shallow sense of posturing to 'fit' a role-prescription ('non-directive adviser', 'devil's advocate' or 'peripatetic catalyst') but in accepting that the role will be the product of *active negotiation*, 'made' and constantly re-created in relation to other role-incumbents, about a task.

This is not a simple matter; it is easy for a tutor to slip into a false role. Students are rightly wary of the emergence from the syndicate fitting-room of the previous term's remote, authoritarian mass-lecturer in the strange guise of a non-directive participant. Where there is little 'investment of self', the 'new' role may be tailored to fit into an existing role, serving as no more than a convenient vehicle for a preferred teaching style. For example, a syndicate tutor may 'take' the putative role of 'consultant' while, in reality, acting merely as a 'postman' who dutifully delivers worksheets to his students each week before disappearing to be 'available for consultation'. He perhaps assumes a simplistic dichotomy between dependency and autonomy: by severing contact with dependent students, autonomy automatically follows. What usually follows is that abandoned syndicates die — killed off by neglect, drift, frustration and demoralization.

Another 'surface adopter' decides in advance a model version of what constitutes 'adequate' coverage. Plenary sessions tend therefore to be divorced from the real outcomes of syndicate discussions and are reserved instead for the tutor's preconceived authoritative revelations. After a temporary break in transmission, normal service is quickly resumed. Understandably, student disenchantment with syndicate discussion is swift: it is merely a sophisticated delaying tactic, or a confidence trick, withholding direct access to 'hard' knowledge which can be banked as reliable

examination currency.

Syndicate work can be felt to threaten the students' built-in perception of, and belief in, academic study: it is a new segment of his overall academic experience which violates long established and legitimized 'normal practice'. The security of being led on tight reins along predictable, incremental routes is disturbed; the social surface is no longer preserved intact as the student's interior world is exposed to the conscious scrutiny of his peers. Students can mobilize a whole range of defensive strategies, such as manoeuvring the tutor back into a more familiar leadership style; de-sensitizing hurtful concepts and issues; conspiring to keep tasks unproblematic and non-abrasive; refusing to put personal relations at risk through expressing strong disagreement; or acting out an elaborate charade.

MAJOR CONSTRAINTS IN MANAGEMENT

It may be useful to identify the major constraints that have to be faced in the management of syndicate-based study — not in the hope of 'eliminating' them (no tutor is permitted such tactical freedom) but so that these constraints, when acknowledged and examined, can be transformed into resources.

Students' perceptions of the knowledge they are called upon to acquire, and the sources of its legitimation How students perceive syndicate work as an appropriate preparation for assessment largely determines their attitude to it. Is it 'legal tender'? Will it help towards getting a good degree/reference/job? If superficial content-regurgitation is being rewarded by the assessment system (or if students think it is) then syndicate work will be devalued.

Students' perceptions of their audiences within syndicates and in plenary sessions People tend to match the style of what they say to what they think are the expectations of their hearers. The 'intimate' syndicate audience (Barnes 1976) allows students to be relatively inexplicit, to be hesitant, to change direction in mid-sentence. Mutual trust and communality give them confidence, time and space in which to explain a divergent position in language that other members understand and to sort out their thoughts in 'exploratory' talk. In contrast, the more 'distant' audience of a plenary session puts pressure on the reporter to be explicit in re-organizing the syndicate's collective findings for explanation to an 'unknown' audience. This 'final draft' language may, however, encourage over-concentration on external acceptability and style at the expense of the re-shaping of meanings. Similarly, if a tutor is regarded as arbiter of the language used in syndicate discussions, or indeed if a syndicate reporter takes on such a role, much will be lost.

Students' perceptions of the tutor's authority However liberal his intentions and however explicit his explanation of his management role to students, no tutor can avoid being perceived as a frame of reference, a legitimator of knowledge, setting the parameters of acceptability. However, 'giving

teacher what he expects' may easily take precedence over genuine syndicate enquiry. It is difficult to isolate the syndicate situation from the tutor's involvement in other teaching, and non-teaching, situations. Status, reputation, work norms and expectations — all these are known in advance, so that any re-negotiation of authority relations starts from a pattern already established.

Students' perceptions of themselves as students A syndicate's success often hinges on the nature of its collective image and morale. These derive in part from the norms and expectations of specific student sub-cultures, including relationships established between the members before syndicate work was begun.

The tutor's perceptions of the knowledge students are expected to acquire and of his authority in relation to it If a tutor is unable/unwilling to negotiate the new authority-relations inherent in syndicate work, students are denied a valid syndicate experience. His inability/unwillingness may be due to unease about: loss of academic autonomy, esteem and generativity; abrogation of his (perceived) teaching responsibilities to students and to the college (including control over knowledge 'covered', over students — their attendance, arrival and departure — and over suitable settings and 'props' for small-group work); loss of a directly 'visible' student response to his teaching.

The tutor's perception of himself in his role as manager of syndicate learning Whatever the level of his commitment, it is soon communicated to students. If he adopts a 'consumer' stance to the materials (having played no part in their design) he may refuse to be accountable to the students for the success of their course.

The tutor's perception of students Clear messages about the tutor's perception of students reach them as they interact. A tutor may for example hold low expectations of students' potential for self-directed learning. He may dislike being at close quarters with students, on their own 'patch', when they make the ground-rules of their syndicate discussion.

The content of the assignments Materials may be so minutely structured and over-directive (or perceived as such) that the 'authority of the materials' stands in the way of an 'open' negotiable relationship to the knowledge presented.

Equally, assignments may be so open-ended that students are not only forced to fall back on their own 'commonsense' understandings: they remain encapsulated. There may be so much 'ground to be covered' (actually or apparently) that students feel lost. Passages for reading may be too difficult, too conceptual, too abstract or remote from everyday knowledge, thus encouraging a reified view of the problems raised instead of requiring the student to match the academic sources against his own first-hand experience.

It has proved to be useful, in writing assignments, to try to ensure that material is as self-explanatory and self-contained as possible; that tasks

are suited to team work; that material is arranged so that it cannot be used effectively without some preparation; that references do not provide ready-made answers; and that each assignment starts with an exploration of personal experience, 'commonsense' understandings or an active exercise involving real dilemmas in real contexts. Films, video-recordings, case studies, role-play simulations and other experiential exercises provide many stimulating openings to syndicate discussion, helping to avoid the reification of concepts such as 'authority', 'role conflict', 'leadership', 'bargaining' or 'social control'.

The presentation of reports There are many ways of consolidating the work of one assignment before passing on to the next. The obligation to present a written report may run counter to 'open' learning in several ways. It puts pressure on the syndicates to get something on paper whether the topic has been adequately sorted out or not; it tends to give precedence to writing over listening and reflection; and it tends to promote premature agreement. Nobody doubts the value of formal, written, externally intelligible reporting; but it does tend to absorb a disproportionate amount of time and effort. It is our experience that *oral* reporting in the plenary session (with accompanying visual aids and tabulated or diagrammatic summaries) carries greater potential for sustaining the active, exploratory, interpretive nature of syndicate discussion. Despite the public, pre-planned presentation of ideas — which rightly exerts an influence in favour of logical structure, rational argument and weighing of evidence — it is less inhibiting. The tutor is at liberty to consolidate the syndicates' oral reports as he sees fit, but he must do this in an almost impromptu fashion. The complexities of the above constraints are formidable, and we pass on to consider the strategies that tutors have evolved for handling them.

TUTORS' STRATEGIES FOR COPING WITH CONSTRAINTS

Syndicate-based learning may be viewed as a continuing cycle of *exploration* (private study and syndicate discussions) and *consolidation* (plenary sessions). Each phase poses a dilemma: how to keep *exploration* alive while, at the same time, monitoring syndicates at work; how to *consolidate* the knowledge 'constructed' by syndicates without contributing to 'closed' pedagogy.

In arguing for positive, planned tutor intervention during the 'exploratory' phase, it should be stressed that it is the *quality* of this intervention that is crucial, not its mere duration — whether this is thirty seconds or as much as twenty minutes. However pragmatic or idiosyncratic our criteria for adopting some teaching strategies must be, our monitoring of syndicate discussion calls for an acute awareness of ourselves in role, self-discipline, skill, judgement and sensitivity to group dynamics.

Tutoring cannot be reduced to the purely procedural; the best way to learn how to tutor is to do it. Thus, the ideal-type repertoire of *tutor intervention (coping) strategies* briefly sketched below is not offered in a

prescriptive, definitive, moralistic or directly-utilitarian spirit. No tutor could, or should, 'fit' any single category. People, tasks and contexts change: we cannot stop the flow of real environments. Moreover, tasks vary in difficulty. Students differ in their experience of small-group discussion and collaborative learning, in their readiness for self-direction, in their familiarity with the subject-matter and (by no means least) in their confidence in themselves. Some will need much more help than others.

Below I offer a first draft of a typology or taxonomy of tutors' strategies.

Chairing Take-over by long-stay tutor. Promptly occupies a focal position and signals that he has come to teach rather than to listen. His orchestration permits little scope for exploration, deviation or levity. Student contributions are matched against tutor's authority rather than against peers. Socratic-style cross-examination, 'correction' and re-formulation of student statements; pressure towards logical, explicit argument. Student initiatives and spontaneity stifled or made marginal to tutor's 'optimal path' through the tasks. Visibility of tutor's knowledge saps confidence and inhibits active re-shaping of knowledge, volunteering of personal experience and explanation of ideas in peer language. Private misunderstandings, shared ignorance and confusion remain hidden; spectators are unwilling to risk asking questions, making or contesting assertions or sponsoring other students' ideas. Some compete for tutor's attention and approval but most switch off the 'talking head' and wait for the resumption of student-structured discussion at a more meaningful level.

Feeding A security-seeking, mutual reassurance process. Tutor is perceived as 'good, benign and giving' and obliges by feeding on demand — solving dilemmas, answering all questions directly and making knowledge easily-assimilable. Defines the problematic, outlines strategies to be followed, neatly summarizes discussion before leaving. Over-frequent intervention and premature capitulation to pleas for task-clarification; too quick to head-off diversions, to eradicate error, to 'leap in to repair any silence' (Abercrombie 1968). A painless, effortless and orderly journey to the 'right answers'. No intellectual risks and no negotiation; students need only guess what is in tutor's mind, perform accordingly or wait for his revelation of the pre-established order. Superficial task-completion almost guaranteed. Little opportunity for the group to work out its own structure, plan its own division of labour or develop its own powers of questioning, discrimination and judgement. Everyone emerges unscathed with student dependency and tutor generativity preserved.

Pace-making Tutor's invariably early arrival (he likes to ensure a 'good start') mobilizes 'appropriate' interpretations about the task and how to tackle it. Forces the pace along the 'right track', thereby pre-empting healthy disagreement about how to proceed. His urgency and impatience pressurize students into a search for 'answers' rather than reflective thinking.

He provides leading questions which they have 'failed' to ask of themselves. Everyone tries too hard; the silences are strained. Tutor injects enthusiasm and confidence; the group raises the level of its game but it is the tutor's ground that is covered, on his terms. Having been aroused by his hustling, students are left 'in the air'. Risk of inducing mild group paralysis and a sense of inadequacy because tutor's relevance is not *their* relevance.

Enabling Tutor as a facilitator of social processes aiding syndicate discussion. Unobtrusively supportive presence: not there to 'manage' students. Primarily a non-patronizing listener, refusing to lead, goad, probe, provoke comment or validate argument. Prepared to clarify and amplify, if asked. Nudges students into their own, unhurried exploration of issues, helps diagnose problem-areas, without prescribing. Gives students confidence to try to make sense of their own subjectivity and experiences in their own language, in their own way, at their own pace. Sustains the shy or tentative contributor, as well as the articulate, without explicitly praising or reproving. Students decide what is problematic. Tutor *may* pose questions to sharpen awareness of ignored factors/ideas and *may* help them to focus, reformulate or conceptualize their own interpretations.

Fighting Tutor as a subversive agent, constructively aggressive in countering the collusion of some groups towards reaching a quick consensus — denying conflict, avoiding disagreement, shelving the problematic. Faced with a group's vested interest in 'not understanding' the issues and adopting a 'closed' approach to the task, the tutor plays at being 'awkward'. Does not succumb to student 'withdrawal' symptoms or feigned helplessness and listlessness on being deprived of explicit delineation of problem-solving procedures, instant clarity of meanings and ready-made answers. Insists that they tackle the problems posed or, alternatively, examine *why* they won't/can't. (After allowing several weeks for work norms and a realistic division of labour to become established, he may confront them with his diagnosis of the internal processes and issues of involvement preventing them from taking responsibility for their own learning: an 'enabling' role.) Refuses to bend over backwards in trying to be responsive to unresponsive students, the lack of honesty in such an 'egalitarian' posture only masks the issue of autonomy. Without being a sardonic 'dead hand' or an adjudicator of their conduct and moral worth, he is frank about their efforts. He may draw attention to inadequate preparation; tolerance of 'passengers' and low levels of explanation; the mechanical replication of other people's words; the compilation of individual pieces of information instead of comparison and synthesis; acceptance of the 'authority' of one member — perhaps the 'willing donkey', the most vocal or an older student.

Detachment

Positive Tutor clearly dissociates himself from the role of chairman, discussion-leader or assessor. Refuses to initiate, spoon-feed or placate. Planned non-intervention but available as a consultant. 'Drops-in', listens, refrains from comment and quickly withdraws if the group is

genuinely task-oriented. Stays outside the action because there *is* action. Risks temporarily 'freezing' a syndicate because his silence can be intimidating, accentuating the symbolic but ambiguous meanings of other social signals — gaze, facial expression, gesture and body language — which may be decoded as threatening or judgemental.

Negative Spasmodic visits, with no clear purpose; arbitrary, trivial and inconsistent intervention in discussion. Won't/can't extricate a group from a genuine difficulty in internal organisation or an impasse in clarifying their task. A mere 'dispenser of worksheets', insufficiently familiar with the materials to be catalytic, facilitating or even academically credible. Injects nothing. Acquiesces in anything. Premature emancipation permits so much 'freedom' that syndicates are liable to lose direction, lose heart and disintegrate.

Flight Abandons syndicates. Abdicates responsibility for monitoring the syndicate process; hence, no finger on the syndicate pulse, no awareness of casualties, no experience of what a syndicate feels like from the inside, no first-hand feedback on the effectiveness of the materials. Not available as a 'resource'. The fugitive arrives 'cold' at plenary sessions.

13 THE STATE OF PLAY

M. L. J. Abercrombie

The author of this chapter, Jane Abercrombie, has been one of the pioneers of small-group work in higher education, for which she has won an international reputation. Distinctive features of her overview are: emphasis on the influence of the tutor's style, of the institutional context, and of the assessment procedures on the success or otherwise of the method; and more particularly analysis of the problems created for the tutor by the fundamental change in authority structure involved in the adoption of syndicate methods. Finally she offers suggestions for research on the technique. (Editor)

To be asked by the editor of this book to comment on the current state of play in the syndicate field gives a very special pleasure to one who, nurtured in the education tram lines of the early century, became addicted to group work, experienced the earthquakes of the late sixties, and now loves to contemplate the rebuilding of higher education that they made possible. Various kinds of group teaching, including syndicate methods, have played an important part in this, and the book reverberates with two of the main trends that have shaped higher education in the last decade — educational technology and the recognition of the need for staff development. Educational technology directed teachers' thinking towards the usefulness of a particulate approach to teaching; the population of students or children to be taught came to be more precisely delineated; behavioural objectives could be specified as distinguishable from aims; a more informed selection could be made from the great variety of audio-visual as well as print-based teaching techniques and learning experiences now available; the need for a more systematic 'evaluation' of a course came to be recognized — an assessment of the impact of the course, not only on the pupils' factual learning but on this higher order intellectual skills and on the outlook of the various people concerned in the course.

Staff development followed more slowly, for the notion that nurture could improve on nature in the case of teachers no less than of students required a mental somersault of Copernican agility. But the teachers who contribute to this book do so with a self-consciousness that was much rarer in the sixties.

As the book testifies, the syndicate movement flourishes abundantly. It flourishes in a variety of places, occasionally throughout an institution, more often in one of its courses, or in only part of a course. The heterogeneity

of the chapters illustrates how syndicates are being used by varied personalities practising with conscientious zeal, self-consciously and critically, hospitable to new ways of teaching and open-eyed to their possible side effects. A rigorous technique is in action; the state of play is healthy indeed.

The following themes can be identified, sometimes treated intensively in specific chapters, and generally implicit in several of them. Perhaps most importantly, the need for a different attitude and way of behaving on the part of the teacher is clear, highlighted in Owen's chapter (12) on the tutor's role. In reform in education, it is conventional to concentrate on the need for students to change their attitudes and behaviour; here we have a healthy trend towards self-consciousness on the teacher's part. A second theme is the effect of the educational context on the conduct of syndicate work. This is brought out sharply in the study described by Chambers (Chapter 10), of six colleges collaborating in research on the method, in which it was found that apparently standardized approaches had different responses from students, according to the tutor or to the more general institutional environment. In other chapters we hear of syndicate methods spread through the whole college or department, or having to be abandoned with administrative changes. It is interesting to note the acceptance of the idea that students (like children) when talking among themselves use a language which they can play with more comfortably and profitably than with that used by practised teachers. This supports the notion that the teacher's presence can actually act as a brake on students' mental development. Perhaps the most worrying and contentious theme is that of evaluation of the method. Teachers are not only concerned with the technical difficulties of evaluating reliably and validly a method of teaching whose objectives are so generalized, and aimed at preparation for a lifetime of continuing education. They are also concerned with the effect of examinations on the process itself, the sensitivity of students to the changed perception of the tutor when, having hitherto relinquished the role of authoritarian teacher, he takes on that of a necessarily authoritarian examiner. The solution of this dilemma is perhaps the greatest problem in the development of any attempt to encourage autonomy in students.

STRUCTURE AND FREEDOM

The special attraction that the syndicate method has for me relates to the way it makes a frontal attack on the problem of structure and freedom in higher education. Gerald Collier pioneered the movement in this country and I well remember the impact his book made on me in 1968. I was in a receptive state. I had been grappling in embryonic manner for some thirty years with the difficulties of learning to behave scientifically in biology, to observe accurately and comprehensively and make reasonable inferences from the observations. I had begun to understand how intellectual development may be stultified by the perpetuation which higher education

entails, of the transference relationship (as the psychoanalysts call it) — of the biological dependence of the young on the old. The solution I had arrived at involved a change of behaviour on the teacher's part, away from the habit of didactic teaching, towards facilitating interaction between students in a learning group. It requires very little preparation of material, only the provision of a relevant and stimulating topic as a focus for 'free' or 'associative' discussion. The teacher is present during the discussion, and plays a highly disciplined role in it. The syndicate solution takes a different approach to the same educational objective — that of helping the students towards greater autonomy in learning through interaction with peers. The teacher takes great care in structuring the syndicate, provides material and references, poses questions, etc., and the importance of doing this thoughtfully and thoroughly is stressed over and over again by the contributors to this book. But by contrast with the 'free' or 'associative' discussion technique, the syndicate teacher essentially absents himself for all, or a large part of, the syndicate's discussions and reappears in a structuring role when the syndicates report on their independent work. It seemed to me that this method provides a well defined way of helping students to master the body of knowledge that examinations require (which the free discussion method does not attempt to do). It helps them also to acquire scholarly habits which would enable them to continue to learn, to behave resourcefully, and to think reasonably and creatively.

Let us look a little closer at this business of structure and freedom, using a biological analogy. The human skeleton looks stable and durable in the museum — what more rigid and long-lasting? In life its job is to give support to soft flesh and blood and allow mobility of the whole body. It consists of separable rigid elements sweetly and smoothly jointed together in such ways as to permit sensitive muscles and nerves to perform their exquisite tasks. A man can do a range of movements that no other single species can command — he can walk, crawl, run, hop, climb, jump long or high, swim with a variety of strokes. Not only are the rigid bony elements so mobile on each other, but the architecture of each bit of bone is in life by no means static. Each is a whirlpool of metabolic activity, undergoing mineralization or demineralization according to stresses and strains of use, and the physiological state of the body; areas are eroded or extended by the work of regiments of cells that make or destroy. Just so the skeletal structure provided for the syndicate, and necessary for its integrity, must be modifiable at anatomical and at molecular level, tingling with life, responsive to continual changes and extensions of demand.

Looking a little ahead, the structure of syndicate work as described in this book may be seen as a transient developmental stage in the progress towards full student autonomy. By the end of a course, the initial and closing stages, at first controlled by the tutor, could be taken over by the students. This would be consistent with the use of syndicate methods in the training of teachers. Syndicate work might then look more like project

work, with which it shares the aim of helping the student to strengthen his ability to undertake initiative resourcefully. But usually projects are intended for individual work, and do not necessarily involve co-operation with peers, nor give training in team work; the student may be discouraged and overwhelmed by his feeling of incompetence in the face of too big and lonely a task. The great advantage of syndicate work is in its giving of experience of team work, which strengthens the individual to work alone as well as in collaboration with others.

There is one aspect of syndicate work which I think is not adequately treated in this book — the teacher's needs (though these are certainly recognized). The adoption of behaviour which consistently and continuously encourages autonomy in pupils necessarily causes some strain in people who have not only been brought up as most of us have been, in a culture thoroughly (though perhaps covertly) imbued with authoritarian attitudes, but have made some kind of academic success in it. Self-selection plays its part in the recruitment of teachers; it is likely that those who opt for teaching are by nature concerned for the welfare of the young, and tend to collude with them in the authority-dependency relationship, feeling the need to be in control, looking after the fragile young with tender loving care. In syndicate work, they need to adapt to a divided role — one moment they are busy devising the essential academic framework; at another they spatially isolate themselves from the site of action; at still another they summon all to a plenary session, putting the final touches to the students' unfettered labours, adding, deleting, underlining, correcting. What a chameleon existence they must lead! Switching attention from an individual to a syndicate, or a group of syndicates; concerned with the body of knowledge, with facts that must be checked and rechecked, and with fancies that must be allowed to come and go; with skills social and intellectual; with likes and dislikes, loves and hates. Owen (Chapter 12) writes eloquently on the demands made of the teacher:

'The "executive" role, as compared with that of lecturer/seminar leader, requires the tutor to make a heavier investment of "self" in the teaching activity. ... It calls for skill in managing one's own participation in the role and an awareness of one's own motives so that one can make an informed judgement about where to hold the balance between student security and anxiety; ... Merely co-acting with students and muddling through administratively are not enough; ...'

Our own education, the tram lines of 'O' and 'A' levels, of degrees and diplomas, did not prepare us for this many-coloured task. Beginners in syndicate work have difficulties, as Glew recognizes (Chapter 5):

'The method initially generated a high degree of insecurity for the tutor, since the pattern of interaction and control was considerably altered by 'giving away' some of his authority.'

But even the most experienced could be happier and more effective if they had the continued support that can be given by the very same source as provides the energy for syndicate work — discussion among peers. This also needs structure, but, academically, a minimum of it — a situation which gives people confidence to talk in a group, to find support in similarities of experience, and stimulation and enlightenment in their differences.

AREAS OF RESEARCH

As to research on the method, I strongly support Gerald Collier's advocacy (in the Postscript) of the need for 'a detailed observation of individual syndicates in action over a substantial period of time.' I think it is essential, if this is to be done rigorously, that discussions should be recorded and transcribed. This is an expensive and time-consuming process, requiring patience and intense prolonged commitment. It permits, however, a very rewarding exposure of the complexities of the processes involved, and its great advantage is that its benefits can feed back into the teaching set-up contemporaneously. By contrast more statistically oriented researches on large populations give results that are available often too late to be of great use, the contextual factors having changed (or so has been my experience). Research done above the students' heads, as it were, often rouses hostility: students do not enjoy being guinea pigs even in the cause of the advancement of knowledge. I would suggest that syndicate work is especially well placed to develop a self-regarding, reflexive sort of research. Why not give a group of students, as part of the course, the task of recording one of their early, and one of their later, syndicate discussions? They would check the typed transcripts, and study them, attempting to detect differences of performance with time. Each student could study his own contributions, and compare and contrast them with those of his mates and thus extend his own repertoire. When the processes of documentation and analysis have been thoroughly mastered on the small scale of intensive study of a single syndicate session, a library could be built up which could serve as the basis of several comparative studies. Emphasis could be placed, for instance, on comparing with each other the performances of different syndicates doing the same course and tackling the same problem. Or more general variations of procedure may be discernible by comparing syndicates directed by different tutors, and in different institutional climates. Each step in the research would be of educational value to the student, furthering his understanding of his own habits of working, and of his interactions with colleagues, at the same time critically applying himself to the intellectual content of the course — in fact, fulfilling the aims of the proponents of syndicate work.

14 GUIDELINES FOR AN ASPIRING PRACTITIONER

Gerald Collier

This chapter offers guidelines for the practising teacher in higher education, with an indication of some of the pitfalls — of which the preceding chapters have recorded a good many. It would probably be true to say that any teacher setting out to improve his own teaching will find himself involved in a great deal of extra work, and the organization of a syndicate-based course is no exception.

INPUT

Deciding on Purposes

A syndicate-based course needs detailed advance planning. A teacher needs to clarify in his/her own mind the purposes of the course: a course intended to follow through a published syllabus — as in Chapters 2, 4, 5 and 11 — calls for a different pattern of organization from one intended to develop powers of practical judgement in the setting of a specific problem of (for example) engineering design (Chapter 9) or regional study (Chapter 8). In particular, if one is embarking on syndicate work for the first time, one needs to weigh very carefully the balance between information to be assimilated on the one hand and, on the other, the skills and insights to be developed. Fransson reports an instructive case from the Political Science department at Uppsala University, where an analysis of the teachers' aims was found to be seriously at variance with the actual demands of the examinations set, namely factual knowledge and neutral summaries of the arguments found in the textbooks (1977; cf Cox 1973). However, although it is broadly true that the organization of a course is to be adapted to its aims and objectives, it has to be recognized that few teachers, embarking for the first time on a syndicate-based course, are able to predict very precisely the outcomes of their course. As Stenhouse has emphasized, in many types of teaching one can only attempt to create conditions which favour, but by no means assure, the development of certain insights or perceptions (1975); but here, in the early years of a course, one may find the academic impulse generated by the work developing in quite unforeseen directions. So in the evolution of a syndicate-based approach over a period of years a teacher may well find the balance of his aims and objectives shifting.

One aspect which will need special consideration is the balance between syllabus coverage and the rounded study of major topics. Several workers have commented that in practice they prefer to give precedence to the latter (Chapters 3, 4 and 5).

The Design of Assignments

The framing of suitable assignments is also of the greatest importance. Various criticisms have been expressed in the preceding chapters and elsewhere. Some assignments are too abstract for the particular class (Chapters 5 and 12), some are too vaguely phrased or contain ambiguities (Chapters 3, 12), some too exclusively based on advanced academic texts (Chapter 3). Some fail to relate the texts sufficiently to the students' first-hand experience (Chapter 12; Lawrence and Robinson 1975). Some are too minutely structured and over-directive (Chapter 12). Some fail to focus on significant issues (Chapter 3). Some are too large and ill-structured: one consisted of eight questions, with thirty-two assorted references and no guidance on how to handle the material (Lawrence and Robinson *ibid.*). Those which generate student involvement must effectively appear to be ones which in the students' eyes have an aura of reality about them: assignments that are based on well chosen audio-visual material (Chapter 2) or role-playing (Chapter 10), and especially on concrete problems directly related to the students' concerns (Chapters 2, 4, 5, 9, 10; see also for example McMaster 1972). The design of suitable assignments can accordingly take a great deal of searching out of references — to books, journals, audio-visual materials, field observations, in-tray documents and so on — and careful formulation of tasks if one is to engage the students fully and to cater for any wide range of abilities and interests.

The Membership of Syndicates

The composition of the syndicates can be determined in various ways. I have normally been in favour of self-selection and this view is supported by such protocols as the following, drawn from the videotape compiled at Bede College, Durham, and reported in Chapter 2;

'In my particular instance three groups were self-selecting; the remaining group was a group of five people who just happened to be flung together by circumstances and it was significant that the performance of this group fell very short from the performance of the self-selecting groups.' (Tutor)

'If you're working with colleagues there's an obligation on you to get your piece of work done. Therefore you come together as a team: you're not being told by the tutor you must read or you must do but you're discussing in the syndicate with your colleagues and therefore there is an obligation on you to join in.' (Student)

'It is important that the colleagues are of your choosing. You are not told 'This is your syndicate group'; you are told 'Sort yourselves out so that you can get people to work with who are compatible.' (Tutor)

But in a widely scattered community accessibility may be a big practical factor and a geographical basis for syndicate membership may be preferable. One tutor commented:

'I think friendship probably has less importance than accessibility. I think one must be able to meet regularly and easily without too much travelling.'

Again, students who join a syndicate-based course in their first term will know few of their fellows and the basis of choice will be thin. In one of my courses at Temple University, on values and moral education, three out of six groups experienced some difficulty in collaboration and it may be that the material of this course tended to accentuate temperamental or emotional differences between members who scarcely knew one another before. Other methods of recruitment to the syndicates are illustrated in the present book: staff decision (Chapter 3, 4); students' choice of topic (Chapter 9); random allocation (Chapter 6).

PROCESS

In the context of current practice in higher education few tutors or students have had any sustained experience of the syndicate type of work before embarking on a first trial, and both parties have to learn how to use it.

Introducing Students to the Technique

For students a massive adjustment of outlook is necessary. None of the usual structures of directed learning are present and students are apt to feel they are lost in an uncharted open space. They have to be advised that the 'rules of the game' have been changed: they are no longer in the business of assimilating other people's knowledge but in that of making their own. Many will be unable to understand this, having no experience to build on; some — as Becker records (1961) — will be sceptical of the reality of the claim, having had previous such promises belied in practice; some will find the experience disturbing and will need counselling, or even transfer to an alternative course (Chapters 2, 10, 12; Fransson *ibid.*; Cornwall 1980).

The Organization of Syndicates

The ways in which syndicates organize themselves vary widely. A course in which syndicates number eight members is likely to develop a more formal pattern, with a chairman and secretary, perhaps on a rotation basis, as in Chapters 3, 4, and 9, than one in which the membership averages five.

Relations within Syndicates

Since the interactions within a syndicate are the basis of the intellectual and imaginative vitality of the members' work, a great deal depends on the

development of mutual trust and understanding within the syndicate. This can be disturbed in various ways: there can be personality clashes (Chapters 4, 9; cf Holder and Wankowski 1980); there can be over-voluble individuals (Chapters 6, 8); there are occasions when nobody listens to anyone else (Beach 1968; Chapters 4, 8); there can be 'passengers' (Chapters 2, 6, 7, 9, 11). But these obstacles are not necessarily to be taken at their face value: Clarke (Chapter 4) argues that students should be taught, and expect, to work effectively with anybody, however uncongenial personally. Although the danger of 'passengers' is referred to repeatedly, the problem was scarcely mentioned in the reports of the colleges visited by Lawrence and Robinson or in the videotape of Chapter 9: it seemed that the members were generally confident that they could handle the problem without great difficulty.

If the level of mutual confidence within a syndicate is not high enough to foster the genuine searching, the genuine tentativeness of a shared exploration (Chapters 3, 5), one may find a premature or superficial consensus, or even the authority attached to a didactic teacher being transferred to the source texts and an 'uncomprehending adoption of the language of the social sciences', comparable to the parrot learning of mathematics by children who can speak the conceptual language without understanding it (Chapter 12; Lawrence and Robinson *ibid.*).

The Tutor Learning an Appropriate Style

Tutors too need to learn how to manage a syndicate pattern of work. The work of the syndicates is evidently deeply influenced by the way in which the tutor handles it (Chapters 10, 12). Owen offers (Chapter 12) an illuminating analysis of this influence, pointing out how inescapably a tutor's perceptions of the students, of his own authority in relation to their learning, and of the syndicate technique, express themselves in the style of his transactions. This personal style may range from the individual who stifles student exploration of ideas by his authoritative interventions in discussion or the one who feeds a dependency relationship by supplying answers to every request for views, to the 'constructively aggressive' tutor who counters the effort of some groups to deny conflict and arrive at a quick consensus, or the one who acts as a catalyst, clarifying and amplifying without prescribing. It has to be recognized that the tutor is subjected to an increased exposure: he cannot foresee all the questions that may be posed, all the challenges that may be thrown at him, by students who have been reading widely and quite possibly tapping first-hand experience from far outside the tutor's range (Chapters 5, 10). He has given away some of his authority and he may have a strong sense of insecurity (Chapters 4, 5, 12, 13). Owen's analysis may appear obscure to a tutor before he has had experience of the technique but it will undoubtedly repay careful study as the tutor extends his experience.

Consolidating the Work of an Assignment

The consolidation phase of an assignment sometimes presents difficulties (Chapters 2, 3, 5, 10, 12). Tutors may be reluctant to offer a formal lecture summary for fear of reintroducing a didactic element (Chapter 13). Without this, students are apt to feel they have no clear guidelines as to what an examiner, whether traditional or other, will be looking for (Chapters 10, 11, 12). If syndicates report their findings by an oral presentation at a plenary session, and the other syndicates have not all studied the same topic, this may be as difficult for the latter to follow as a formal lecture on an unfamiliar topic. There have been complaints from students that student reports are apt to be poorly presented and boring (Lawrence and Robinson *ibid.*; but see also Chapter 5). On the other hand, the production of written reports can inhibit the full exploration of a topic (Chapter 13). The consolidation stage of the work clearly has its own problems but experience will no doubt show how the need in any particular phase of work can be met.

Sources of Errors

It will be evident that errors can creep into the work at several points: students may misunderstand the sources they are using; they may report them incorrectly or misleadingly to their colleagues; they may as a result of prejudice or one-sided experience arrive at a mistaken perspective. However, it cannot be claimed that lecture-based courses are immune to such problems; and the written reports and plenary sessions give reasonable opportunity for errors to be detected.

The Influence of the Institution

Finally, it must also be recognized that the tutor's style in the management of syndicate work is not a matter purely of individual personality: the culture of the institution and the sub-cultures of the department and the student groups are also critical factors (Chapters 4, 10, 11, 12, 13).

OUTPUT*Assessment Procedures*

The main problem in relation to output is assessment. It will be abundantly clear from the preceding chapters that the outcomes of syndicate work which have been valued by the teachers have been, in the affective domain, the high degree of involvement of the students and their increasing commitment to their studies; and in the cognitive domain the development of higher order skills. This is not to depreciate the assimilation of information; and indeed some of the contributors comment favourably on this aspect (Chapters 2, 5, 6, 11). The problem lies in the method of assessment. Students also have expressed their attitude forcibly, as the following protocol from the Bede College videotape shows:

'Firstly I didn't know whether the group was picking out the right topics, the major topics, the major questions; and secondly I didn't know whether we were drawing the right conclusions. There was discussion time at the end for groups to report back but often that didn't happen — there wasn't enough time. And if you'd come up with some conclusions that are written down and you don't know whether they're on the right things coming up for the exams., you don't know whether you've drawn the right conclusions — it may be things that will lose you marks because you've drawn the wrong conclusions.' (Student)

The dominating influence of the perceived nature of the assessment machinery has, as was noted in Chapter 1, been shown by Marton and Saljö (1976b) and is illustrated here in Chapters 9 and 11, and most strikingly in Chapter 12. Traditional examinations appear to be perceived by many students as tests of 'knowledge' in the sense of aim (1) stated in Chapter 1 (Miller and Parlett 1974; Lovell 1968). Despite intensive debate on university examinations in certain quarters (Cox 1967, 1973; Klug 1975; Heywood 1979) and experimental developments in certain subject areas, little headway has been made generally in higher education in the matching of assessment techniques to the aims of teaching. The method of assessment for syndicate-based work accordingly needs all the more careful handling.

One method is to design the examination questions so as to test powers of judgement rather than accuracy of recall of information and the evaluation of that information (Chapters 2, 4). This may be done by presenting statistical material, research abstracts or other source material with questions formulated in such a way as to require the exercise of powers of analysis, synthesis and/or evaluation. A method that has been used in some undergraduate and postgraduate courses on educational principles has been to offer first-hand experience in the shape of videotaped recordings for analysis and comment.

Another method is to require students to produce one or more essays on agreed topics within the scope of the syllabus (Chapter 10). Another is to ask syndicates in their various reports to identify the contributions of individual members. Chapter 9 sets out a detailed list of criteria by which to assess the various aspects of an individual's work during the course as a whole, and that set of categories may offer a convenient starting point. However, a tutor who is dissatisfied with the techniques known to him would be well advised to consult Klug's *A Question of Degree* (1975) and Heywood's *Assessment in Higher Education* (1979), which contain useful discussions of the way in which assessment techniques can be matched to the aims of courses.

Whatever methods are used it seems indispensable to ensure that tutors provide opportunities for discussing with their students the purposes of the syndicate organization, the criteria that will in consequence be used in assessing the students' work, and the relation of the methods of assessment

to those purposes and criteria. Even at that there may appear to be a somewhat sharp disjunction between the role of the tutor as organizer of study and personal guide, and his role as final unchallengeable examiner. It may be that *in this type of work* the time has come for student classes to nominate individuals to work with the tutor when he assumes his role as final marker and awarder of grades (Chapters 4, 5; Collier 1969).

It has to be recognized too that the value-assumptions underlying the syndicate-based work reported in this book may turn out in practice to be out of tune with those of the institutional culture, or of the departmental sub-culture, or indeed of the practitioner himself, when the technique is put into action (Hewton 1982).

Evaluation

Assessment procedures are of critical importance in the implementation of syndicate methods. But they need to be seen as one component only of an overall evaluation of a syndicate-based course. Such an appraisal must take into account not only the students' academic and affective development but the impact of the work on the tutor(s) concerned and on the institutional culture (Chapters 2, 5, 10, 11, 12, 13). It is advisable to build in agreed procedures for this evaluation, as part of the course proposal. Because the impact is so difficult to predict in the experimental stages it might be of considerable practical assistance to the course tutor(s) to follow up Abercrombie's suggestion (Chapter 13) for meeting others engaged in syndicate work.

Applicability of the Technique

The present chapter is addressed to an aspiring practitioner. If a member of an academic department, or of a staff development unit, wishes to propose the use of the technique it cannot be taken for granted that a department accustomed to a quite different pattern of work will necessarily be competent at this technique, or even convinced of its applicability. In these circumstances a syndicate basis of organization is only likely to be adopted and carried through effectively if it is seen as a possible answer to a practical departmental problem, as for example if a course or programme is failing to win the co-operation of the students (Eraut et al. 1980; Hewton 1979, 1982; Collier 1978).

One of the spheres of work now being developed fairly extensively is that of distance learning; the Open University has set the pace and evolved its own distinctive style. Distance learning is gaining ground in colleges of further education and where these are moving into the area of higher education, as in the higher diplomas of TEC and BEC, they may well wish to exploit the distance learning approach. In such cases it may be profitable to encourage students to set up syndicates in their own localities, to generate the interaction and stimulus to thought which the solitary student may lack. Assignments will need to make provision for the special circumstances (Cornwall *ibid.*).

POSTSCRIPT: SCOPE FOR FURTHER INVESTIGATION

Gerald Collier

The preceding chapters have indicated many of the problems and difficulties that are liable to face the practitioner. The records may or may not have persuaded the reader that a *prima facie* case for the particular contribution of syndicate-based methods has been established; what is needed now is a detailed observation of individual syndicates in action over a considerable period of time, with the object of identifying the distinctive features of this type of peer-group learning and tracing what (if any) connections exist between the outcomes and the contextual, input and process factors.

CONTEXTUAL FACTORS

The major area of investigation here must be the nature of the institutional culture within which syndicate methods are being used: the regulations, the authority structure, the ethos and relationships, the prevailing perceptions of teaching and learning, the development of sub-cultures. Basic data on the age, sex, qualifications and experience of the teachers and the students would be needed.

INPUT FACTORS

Possible areas of investigation here are the following.

The nature of the advance planning: the articulation of aims and objectives; the balance of emphasis between different types of purpose; the method of provision for source material.

The form and content of the assignments: the extent to which the questions presented in the assignments call on the first-hand experience of the students; the extent to which the questions are amenable to the students' handling, given the time and resources available; the extent to which the structure of the assignments promotes study in depth; the use of audio-visual materials, role-playing, problem packages, etc.; the formulation of the instructions given in the assignments; the extent to which the questions involve the identification and formulation of new problems contained in complex material.

The composition of the syndicates: the method of recruitment to the syndicates; the personality characteristics of the members of 'successful' and 'unsuccessful' syndicates; the initial attitude of the students to the syndicate-based course.

The training or advice given to the students: the nature of this;

the duration of the process; the variation in student response to it.

The training or advice given to the tutors involved.

PROCESS ASPECTS

Various aspects of process call for attention.

The process of interchange: the extent to which the students translate the source material into peer-group language; the process by which individuals' views are modified in discussion and shared views are arrived at; the process through which clarification of concepts takes place and the extent to which first-hand experience is invoked; the variation of interaction with the subject area.

The consolidation stage: the methods adopted for consolidation; the extent to which the handling of the consolidation stage contributes to a firm grasp of the conceptual structure of the material and facilitates the subsequent stages of the study; the degree of persistence shown by the students in their search for understanding.

The nature of the collaboration: the internal organization of the syndicates; the number and distribution of students' initiatives; their willingness to admit to lack of understanding; the degree of their attentiveness to one another; the development of work norms and other features of their non-academic sub-culture; the influence of the duration of a course on the quality of a syndicate's work; the development of mutual trust.

Assessment procedures: the nature of those procedures in respect of assimilation of information, of higher order skills, and of affective development; the students' perceptions of them; the tutors' perceptions of and aims in assessment.

The tutors' style: the tutors' perceptions of the method; their skill and degree of commitment in their handling of the technique; the way in which they manage their relationships with their syndicates.

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INDEX

- Abercrombie 5, 9, 11, 29, 92, 97,
Ch. 13
Aebli 11
Aims and assumptions — in higher
education 4 ff
— of syndi-
cate methods 10-12, 15-16, 34,
42-43, 67, 69, 70, 77, 102, 105,
110
Amara 11, 12
Anticipation of future contingen-
cies 8
Argyle 16
Assessment — methods of 13, 15,
34, 37, 40, 42, 43, 46, 48, 49,
51, 59, 67, 72-76, 85-86, 87-88,
90-91, 109-110
Assignments — design of 14, 15,
26-27, 34, 35, 36, 43-44, 57-59,
60, 68, 69, 77-78, 86, 95-96,
106, 112
— examples of 15,
26-27, 36-37, 50, 55-56
— source material for
14, 64, 86
Attendance at classes — improve-
ment of 10, 41
Australian Department of Foreign
Affairs 64
Ausubel 5
Authority in syndicate-based
courses 15, 16, 18, 20, 27-28,
30-33, 64, 72, 94-99, 101, 103,
107, 108
Autonomy of learners 5, 6, 18,
29-30, 33, 102
Bales 49, 53
Barnes 12, 94
Beach 40, 108
Becker 10, 107
Below-average pupils — gains of
11, 12, 51, 63
Berman 10
Bernstein 91
Billing et al. 10
Bligh 3
Bloom 4, 5, 10-11, 79
Blunt and Blizzard 11
Books — use of 18-19, 21
Botkin et al. 7-8
Brainstorming 3, 62, 69
Broadbent 28
Buzz groups 3, 63, 64
Carter 65
Chambers 38, Ch. 10
Clarke Ch. 4, 108
Clement 11
Club of Rome 7-8, 12
Cognitive skills, higher order 4,
5-6, 7-8, 9, 10-11, 20, 21-22, 23,
40, 47, 79, 88, 98, 105, 109, 113
Colditz 38
Collaboration within syndicates 3,
5, 6-7, 8, 9, 10, 11-12, 16-18,
20-22, 29, 30-33, 34, 35, 37,
44-45, 50-52, 54, 59, 60, 65, 67,
68-69, 71, 72, 94, 95, 102, 106,
107-8, 113
Commitment to study 8, 10, 16, 17,
20, 21, 23, 24, 30, 34, 40, 62,
65, 109
Communication skills 5, 6, 10, 11,
18, 20, 23, 30, 31-33, 44, 66,
68, 71-72

- Composition of syndicates 13, 24,
34, 35, 42, 44, 48, 60, 64-65,
68, 106-107
- Conceptual structure 5, 6
- Conformity within syndicates
16-18, 38, 94
- Consolidation of assignment work
4, 13, 14, 28-29, 30, 34, 37, 42,
43, 45, 48, 49, 55, 65, 73, 86,
89, 96-99
- Cornwall 10, 11, 107, 111
- Costin 11
- Cox 105, 110
- Culture — dominant influence of
institutional 77, 78, 83, 84, 85,
87, 89-90, 95, 101, 109, 111
— of syndicates 23, 37, 60,
89
- Deep processing of academic
material 9, 11, 13, 21-23, 47,
97-99
- Department of Education and
Science 15, 83
- Deutsch 10
- Difficulties in syndicate work 28-29,
30, 37, 38, 39, 40, 42, 43, 44,
51-52, 60, 64, 65, 71-72, 78,
80-83, 84-86, 89-91, 93-99, 103,
Ch. 14
- Durbin and Taveggia 11
- Elstein et al. 36
- Engel et al. 36, 38, 41
- Enjoyment of compulsory course
10, 21
- Entwistle 4, 9, 11, 22
- Eraut et al. 111
- Errors — sources of 28, 40, 109
- Ethical issues 7-8, 12, Ch. 7
- Evaluation 23, 30-33, 38-41, 46-47,
50-54, 66, 73-76, 80-86, 90-91,
101, 111
- Examinations — adaptation of: see
Assessment, methods of
- dominant influ-
ence of 9, 10, 13, 30, 82, 84, 85,
Ch. 11, 94, 101, 110, 111
- Experiential learning: see First-
hand experience
- Feletti et al. 38, 39, 41
- Field 10
- Films, feature — use of 14, Ch. 7
- Finniston Report 10
- First-hand experience - relation to
academic study 14, 20, 23,
36-37, 40, 44, 45, 47, 57-61, 84,
91, 106
- Ford 9, 22
- Fransson 9, 11, 15, 16, 40, 90, 105,
107
- Free group discussion 3, 102
- Gagne 63
- Glew 22, Ch. 5, 103
- Goffman 83
- Goldschmid 6, 12
- Gorman 63
- Hale Report 5, 9
- Harp of Burma 56, 58-59
- Harries 64
- Hartley et al. 6
- Hewton 111
- Heywood 110
- Hidden curriculum 29, 91, 92
- Higher order cognitive skills: see
Cognitive skills
- Hodgkin et al. 37
- Holder et al. 108
- Houle 21
- Hovey et al. 52
- Independence of judgement 5, 6,
15, 17, 18, 19, 22, 23, 33, 34,
39, 57-61, 79, 85, 88, 107, 110
- Information — memorization of 4,
6, 9, 15, 19-20, 30, 40, 89, 91,
94, 109, 110

- Innovative learning 7-8
- Intellectual stimulation in syndicates 18, 19, 22, 23, 79, 81
- Inter-disciplinary approach to social problems 6-8, 12, 23
- Involvement generated in syndicates 10, 13, 16-18, 20-21, 23, 30-33, 38, 45, 47, 53, 54, 59-61, 65-66, 89, 106-107
- Judgement — powers of: see Independence of judgement
- Keller Plan 6
- Klug 110
- Knowledge — ambiguity of concept of 4-5, 91, 92-96
 - amounts acquired by different methods 11, 30, 51-52, 84, 90-91
 - appreciation of provisional nature of 11, 22, 23, 30, 47, 59-61, 88, 89, 94-96
- Lawrence et al. 84, 87, 88, 90, 92, 106, 108
- Leaders, academic and managerial 62, 65
- Learning — autonomy in: see Autonomy
 - by shock 7-8
 - innovative 7-8
 - maintenance 7-8
 - process of 4, 5, 6, 7-8, 9-10, 11, 19, 20-23, 28, 47, 89, 92-96, 101-102, 112-113
- Leeder et al. 38
- Lewis, C.S. 56, 58, 59
- Loneragan 4
- Lovell 110
- MacDonald et al. 90
- McKeachie 15
- McMaster 38, 106
- McMillen et al. 66
- Maddison 34
- Maehr 21
- Mager 78
- Magin 11
- Mahan 63
- Maintenance learning 7-8
- Manipulative skills 4, 6
- Marton et al. 9, 11, 90, 91, 110
- Membership of syndicates: see Composition of syndicates
- Memorization of information: see Information, memorization of
- Miller et al. 110
- Morrill 60-61
- Motivation increased in syndicates: see Involvement generated
- Multi-disciplinary approach: see Inter-disciplinary approach
- Newcastle University Faculty of Medicine 34, 36, 37
- Newhouse 10, 21, 81, 87, 88
- Newman 4, 9
- Objectives, behavioural 37, 78-80, 105
- Oldfield 11
- Organization of syndicates 24, 25, 28, 29, 30, 45, 49, 55, 62-63, 64-65, 68-69, 107
- Owen Ch. 12, 101, 103
- Parlett et al. 78, 83-84, 85
- Parr 60
- Parsons 84
- 'Passengers' in syndicates 18, 38, 65-66, 83, 108
- Perceptions of syndicate methods among tutors and students 83, 84, 92, 94-99, 107, 108
- Perry 11
- Personal meaningfulness of knowledge 11, 22, 23, 30, 39, 44-45, 47, 79, 92-93, 104, 196
- Piaget 9

- Problem-solving 7, 11, 35, 36, 37, 62, 63, 65, 67, 68, 85
 Processing, deep and surface: see Deep processing of academic material
 Provisional nature of knowledge — appreciation of 11, 22, 23, 28, 33, 45, 88, 89, 94-96, 107
 Psychometric techniques, use of 30-33, 50-53, 78, 80-83, 85
 Questionnaires — evidence from 16-19, 38-39, 78, 80-83, 85
 Rackham 31
 Reading — critically 5, 6, 9, 11
 — widely 18, 19, 21, 23, 48, 51, 52, 53, 88
 — with purpose 8, 9, 19, 21
 Relations — between tutor and students 13, 18-19, 27-29, 30-33, 59-60, 64, 68, 72, 89, 91, 93-99, 102-103, 108, 113
 — within syndicates: see Collaboration within syndicates
 Reporting back: see Consolidation of assignment work
 Research — aspects of syndicate work calling for 10-12, 16, 23, 30-33, 38-41, 50-54, 73, 76, 78, 80-86, 91, 97-99, 104, 112-113
 Resource persons 34, 36, 62, 65
 Responsibility — students' sense of 10, 17-18, 22, 23, 30, 44-45, 66, 68, 71, 72
 Robinson 10
 Rogers 26, 56, 58, 59
 Rudduck 5, 9, 10, 11, 28, 90
 Satisfaction in study 10, 18, 21, 39, 48, 52, 81
 Saturday Night and Sunday Morning 56, 58
 Schein 6, 12
 Scriven 85
 Seminar 3, 23, 30-33
 Shaw 63
 Shipman 90
 Simons et al. 3
 Size of syndicates 3, 13, 24, 30, 34, 35, 42, 43, 48, 52, 55, 63-64, 67, 68, 107
 Skills — communication: see Communication skills
 — higher order cognitive: see Cognitive skills
 — manipulative: see Manipulative skills
 — professional 34, 35, 40
 Smith 89
 Social Science Research Council 7
 Sociology of education 13-15, 77-78, 85-86
 Source material for assignments: see Assignments, source material for
 Stein 63
 Steinaker et al. 22
 Stenhouse 105
 Surface and deep processing of academic material: see Deep processing of academic material
 Syllabus coverage 11, 20, 30, 40, 47, 105
 Todd 11
 Training — of tutors 36, 39, 65, 70, 72, 86, 103, 104, 108
 — of students 54, 64, 65, 71-72, 86, 93-96, 107-108
 Tutors — as consultants 34, 36, 40, 62, 63, 64, 65, 67, 68, 71
 — impact on 15, 23, 27-28, 30, 42, 47, 72, 92-93, 95, 96-97, 103-104, 105, 108
 — influence of 26, 27, 28, 29, 30-33, 38-39, 59-60, 64-65, 72, 77, 81, 83, 84, 85, 91, Ch. 12, 101, 102, 108, 113

— training of: see Training
of tutors
Tutorial 3, 5
Twelve Angry Men 14, 55

University Grants Committee 4

Values 8, 12, 14, 23, Ch. 7
Vinson et al. 35

Wallach 63
Watson-Glazer Critical Thinking
· Appraisal 49, 52
Webb et al. 52
Whitbread 78
White 11
Whitehead 9, 57
Wilson 4, 9, 22

Zander 10